

# “Study To Assess The Knowledge And Attitude Towards Organ Donation Among Caregiver In OPD KGMU, Lucknow U.P”

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## Abstract:

**Background:** The process of donating an organ involves retrieving biological tissue or an organ from a living or dead person and giving it to a living recipient who is in need. Multiple lives can be saved by a single donor. Organs that can be donated include the heart, liver, kidney, lungs, pancreas, intestine, cornea, heart valves, skin, bonemarrow, veins, and ligaments. There is no minimum age requirement for enrolling up or donate. The minimum age of consent required for an organ donor to donate his /her organs in 18 hours. Organ donation can be influenced by the awareness about importance of organ donation. False beliefs, myths, culture religion and lack of information will affect the organ donation Rate. The demand and supply for organ donation in India are very different. Two situations under which organ donation access that i.e. live donation, decrease donation. Maximum time spans between recovering organs, tissue and transplantation is 4-6 hours for lung and heart. 12 hours for liver, pancreas, kidney 14 hours for cornea.

**Materials and Methods:** A descriptive study to assess the knowledge and attitude towards organ donation among care giver in OPD KGMU Lucknow U.P. samples were selected by nonprobability convenient sampling technique. Informed consent was obtained once individuals were chosen based on inclusion and exclusion criteria. A self-structured questionnaire was given out to 329 members of the sample population, and descriptive and inferential statistics were used to analyse the results.

**Result:** The result shows that; out of 329 sample, 56.23% were males and (144) 43.77% were females, 31.25% (1/3<sup>rd</sup>) of respondents (103) strongly agreed and an equal percentage agreed, indicating a general awareness of the concept. However, 18.75% (62) remained neutral, and 18.75% (62) expressed either disagreement or strong disagreement, revealing gaps in complete understanding of organ donation among some individuals.

**Conclusion:** Considering the study's findings, It demonstrates the extent that knowledge relating organ donation in care giver visiting in KGMU OPD reveals that among 329 sample most of them 206(62.61%) answered correctly while 123(37.39%) answered wrong about the organ donation. The attitude of care givers regarding Organ donation interms of frequency and percentage. It reveals that majority of people 185(56.25%) participants show neutral attitude while (25%) participants show negative attitude.

**Key Word:** Organ donation; Awareness; Donor; Transplantation.

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## I. Introduction

Donating an organ can be done while the recipient is still alive, after they died away, or even when they're brain dead<sup>1</sup>. An growing number of patients with irreversible organ failure are finding that organ donation is a viable therapy option. The grafting of any human organ from a live or brain-dead person to another living person for therapeutic purposes is known as organ donation. The only likely effective treatment for organ failure is organ transplantation. Since many patients have end-stage kidney disease, kidney transplantation is the most common treatment performed worldwide. The liver, heart, pancreas, lungs, eye, and intestine are among the other organs frequently donated or transplanted.<sup>2,3</sup>.

### Objectives:

- To assess the level of knowledge and attitude towards organ donation of care giver in OPD KGMU, Lucknow (UP).
- To find out association between the knowledge and attitude with their selective socio demographic variables.

### Operational Definition

**Knowledge:** Information and knowledge on organ donation among carers are the primary concern of this study.

**Attitude:** Attitude are influence the behavior of a person it may be negative or positive.

**Organ donation:** The act of surgically removing an organ or tissue from a donor and transferring it to a recipient is known as organ donation.

**Care giver:** Individuals participating in this study who accompany and care for patients are known as care givers

## **II. Materials And Methods**

This descriptive study was conducted on general medicine OPD patients caregiver at King George's Medical University, Lucknow, Uttar Pradesh from 4<sup>th</sup> May 2024 to 11<sup>th</sup> may 2024. A total of 329 adult subjects (both male and female) were included in this study.

**Research approach:** In the present study quantitative non-experimental approach was used to collect data & to carry out the study.

**Research design:** Descriptive study

**Research setting:** This was tertiary care teaching hospital based study done in department of OPD General medicine, at King George's Medical University, Lucknow, Uttar Pradesh.

**Sample:** General Population (caregiver) visiting Medical OPD of KGMU, who met the inclusion criteria & agreed to participate where recruited as subject in the study.

**Sample size:** In the present study 329 Samples were used.

**Sample technique:** The non-probability convenient sampling technique was used to conduct the sampling.

### **Sampling Criteria**

**Inclusion criteria:** Adults more than **18 years** of age, caregiver were available when the data was being collected

**Exclusion criteria:** IPD-Those care workers present IPD.

### **Ethical consideration**

Ethical permission was taken from the research ethical committee board; Ethical No. 1503/Ethics/2023. Administrative approval was acquired by the department head of medicine. Tertiary Care Hospital, Lucknow; Application No.725. Samples were asked for their consent and given the assurance that the information they provided would remain private

### **Pilot study**

The pilot study was carried out in order to find the feasibility of the study. The investigator obtained formal permission from the concerned authority prior to study. It was started on 01/05/2024 and was completed on 2/05/2024. Ten sample's data were collected who met the inclusion criteria and exclusion criteria. Data collection steps were followed as of main study. Pilot study showed that the study was feasible.

### **Development and description of tool**

Development and description of tool included 3 sections- tool 1: socio-demographic variables 2: Knowledge and 3: Attitude

#### **Socio-demographic variables:**

The study's demographic characteristics comprise ten categories, including age, gender, religion, marital status, education, occupation, place of residence, family type, information source, monthly income, language, and nationality.

#### **Knowledge questions:**

Self structured knowledge questions related to organ donation 15 sets of question were used.

#### **Questions related to Attitude:**

People's attitudes towards organ donation were evaluated using a self-structured Likert scale. 5 Points Strongly disagree, disagree, agree, and neutral were all included in the Likert scale. There are 15 sets of questions in all.

### **Content validity**

The validity of tool 1, 2 and 3 was checked by 5 experts medical and nursing experts.

## **III. Results**

**Table1: Socio demographic Profile of Respondents (n=329)**

S.No.	Demographic Variables	Frequency (f)	Percentage (%)
<b>1</b>	<b>Age of the mother</b>		
a.	18-27	80	24.32
b.	28-37	102	30.98
c.	38-45	75	22.80
d.	Morethan 45	72	21.88
<b>2</b>	<b>Gender</b>		
a.	Male	185	56.23
b.	Female	144	43.77
<b>3.</b>	<b>Religion</b>		
a.	Hindu	210	63.83
b.	Muslim	83	25.23
c.	Christian	36	10.94
d.	Hindu	210	63.83
<b>4.</b>	<b>Marital Status</b>		
a.	Married	182	55.32
b.	Unmarried	105	31.91
c.	Divorced	42	12.77
<b>5.</b>	<b>Education</b>		
a.	PrimarySchool	58	17.63
b.	HighSchool	84	25.53
c.	Intermediate	92	27.96
d.	Graduate	95	28.88
<b>6</b>	<b>Occupation</b>		
a.	Farmer	42	12.77
b.	SelfEmployed	85	25.84
c.	Government	65	19.76
d.	PrivateEmployed	97	29.48
e.	Unemployed	40	12.15
<b>7.</b>	<b>Residency</b>		
a.	Rural	143	43.47
b.	Urban	186	56.53
<b>8.</b>	<b>Type of family</b>		
a.	Joint	164	49.85
b.	Nuclear	165	50.15
<b>9</b>	<b>Source of information</b>		
a.	Newspaper	82	24.92
b.	Television	122	37.08
c.	Radio	42	12.77
<b>10</b>	<b>Do you have organ donation card</b>		
a.	Yes	62	18.84
b.	No	267	81.16

The table-1 shows that the age distribution reveals that the majority of respondents fall within the 28-37 years of age (30.98%). In terms of gender, the sample is slightly male-dominated, with 56.23% males and 43.77% females, suggesting a near-balanced gender representation. Religious affiliation shows a predominance of Hindu respondents (63.83%). Marital status data indicate that 55.32% of the respondents are married. The education levels show that the largest group has completed graduate education (28.88%), closely followed by those with intermediate education (27.96%). In terms of occupation, private employment (29.48%) is the most common, followed by self-employment (25.84%). Residency data indicate a slight majority of respondents from urban areas (56.53%). The family type is nearly evenly split between joint (49.85%) and nuclear (50.15%) families. Regarding the sources of information regarding organ donation, television (37.08%) is the most common source. Only 18.84% of respondents possess an organ donation card, while the vast majority (81.16%) do not. This finding indicates a potential area for improving awareness and registration for organ donation in the population.

**Table 2: Knowledge about Organ Donation (n=329)**

Question	Correct Answer	Frequency	Percentage (%)
What is organ donation?	A	206	62.61

Organ that can be donated?	B	247	75.08
Organ that can be donated before death?	A	154	46.81
Organ that can be donated after death?	B	175	53.19
Organ that can regenerate after donation?	A	103	31.31
Part of the eye that can be transplanted?	A	226	68.69
Part of the eye that can be damaged during donation?	A	154	46.81
Minimum age for organ donation?	B	267	81.16
When can an individual donate organs?	C	206	62.61
Conditions when organ donation cannot be done if the donor has?	A	185	56.23
How long can a kidney be outside the body before transplant?	A	82	24.92
Understanding about brain death?	A	144	43.77
Can a brain-dead person come back to life?	A	185	56.23
Chemical used to store organ?	C	165	50.15
World Organ Donation Day?	C	123	37.39

Table 2 shows that the data collected on knowledge regarding organ donation among a sample of 329 respondents reveals varying levels of awareness about key concepts. The first question, answered correctly by 62.61% of respondents, indicating a reasonable baseline understanding of the concept. However, knowledge about specific organs that can be donated shows higher awareness, with 75.08% correctly identifying which organs are eligible for donation. Regarding knowledge of when to donate an organ, only 46.81% of respondents correctly recognized that certain organs can be donated before death, while 53.19% were aware of organs that can be donated after death. This disparity suggests that while general knowledge exists, there are still gaps in understanding the specific conditions surrounding organ donation timing. The question regarding organs that can regenerate after donation received a correct response rate of 31.31%, highlighting a significant area of misunderstanding or lack of information, as many may not be aware that certain organs can regenerate. Awareness regarding eye transplantation was notably high, with 68.69% correctly identifying the part of the eye that can be transplanted. Conversely, knowledge about the potential damage to the eye during donation was less well understood, with only 46.81% of respondents able to identify the risks involved. The majority of respondents (81.16%) correctly identified the minimum age for organ donation, reflecting a strong understanding of legal guidelines surrounding the practice. However, knowledge regarding the conditions that would prevent organ donation was less comprehensive, with only 56.23% answering correctly. Understanding the logistical aspects of organ donation revealed further knowledge gaps; only 24.92 % of respondents knew how long a kidney could be outside the body before transplantation. Additionally, only 43.77% demonstrated a clear understanding of brain death, indicating a need for increased education about this critical aspect of organ donation. The perception of whether a brain-dead person can return to life was accurately answered by 56.23% of respondents, showing some awareness of this complex medical concept. Knowledge about the chemical used for organ preservation was more evenly divided, with 50.15 % answering correctly, indicating a balanced understanding of preservation methods. Lastly, awareness of World Organ Donation Day was relatively low, with only 37.39% of respondents knowledgeable about this event. This suggests a significant opportunity for targeted awareness campaigns to promote understanding and engagement with organ donation initiatives.

**Table3: Attitude towards Organ Donation (n=329)**

Statement	Strongly Agree (%)	Agree (%)	Neutral (%)	Disagree (%)	Strongly Disagree (%)
Will you support organ donation?	25 (82)	31.25 (103)	18.75 (62)	12.5(41)	12.5(41)
Are you comfortable talking About organ donation?	18.75(62)	37.5 (124)	25 (82)	12.5(41)	6.25(21)
Are you familiar with the term organ donation?	31.25 (103)	31.25 (103)	18.75 (62)	12.5(41)	6.25(21)
Do you believe that people need to be better aware of organ donation?	50 (165)	25 (82)	12.5(41)	6.25(21)	6.25(21)
Will you donate your organ to Anyone other than family members?	18.75(62)	18.75 (62)	31.25 (103)	18.75(62)	12.5(41)
Do you think organ donation Will help save someone's life?	56.25 (185)	31.25 (103)	6.25(21)	6.25(21)	0 (0)
Are you comfortable receiving Another person's organ if needed?	37.5 (124)	31.25 (103)	18.75 (62)	6.25(21)	6.25(21)
If you donate an organ, would You like to receive money from the recipient?	12.5(41)	18.75 (62)	37.5 (124)	18.75(62)	12.5(41)
Do you think awareness Regarding organ donation is mandatory?	43.75 (144)	31.25 (103)	12.5(41)	6.25(21)	6.25(21)

Awareness plays an important role in influencing organ donation rates?	50 (165)	31.25 (103)	12.5(41)	0 (0)	6.25(21)
Are you comfortable donating Organs only to family or relatives?	18.75(62)	25 (82)	31.25 (103)	18.75(62)	6.25(21)
Do you think your organ Donated may be misused?	25 (82)	31.25 (103)	25 (82)	12.5(41)	6.25(21)
Have you thought about Donating your organ at any time in your life?	18.75(62)	31.25 (103)	31.25 (103)	12.5(41)	6.25(21)
Do you think organ donation is An individual's social commitment?	37.5 (124)	31.25 (103)	18.75 (62)	6.25(21)	6.25(21)
Does your religion allow organ donation?	25 (82)	31.25 (103)	31.25 (103)	6.25(21)	6.25(21)

Table-3 The findings of attitudes towards organ donation show that individuals' views and beliefs are complex.

. When asked whether they would support organ donation, 82 participants (25%) strongly agreed, and 103 participants (31.25%) agreed, reflecting a moderate overall support for organ donation. A combined total of 62 respondents (18.75%) expressed neutrality, while 41 participants (12.5%) disagreed and an equal percentage strongly disagreed, indicating a small but notable segment of the population that remains hesitant or opposed. In terms of comfort discussing organ donation, the responses were similarly mixed. While 62 participants (18.75%) strongly agreed and 124 (37.5%) agreed that they are comfortable discussing organ donation, 82 respondents (25%) remained neutral. A total of 41 participants (12.5%) disagreed, and 21 (6.25%) strongly disagreed, suggesting that while many are open to discussions, there is still a significant portion that may feel uncomfortable or uninformed about the topic. Familiarity with the term "organ donation" showed that 31.25% of respondents (103) strongly agreed and an equal percentage agreed, indicating a general awareness of the concept. However, 18.75% (62) remained neutral, and 18.75% (62) expressed either disagreement or strong disagreement, revealing gaps in complete understanding of organ donation among some individuals. When asked about the need for awareness regarding organ donation, a substantial 50% (165) strongly agreed, suggesting a strong consensus on the importance of public education in this area. Only a small number expressed disagreement (6.25%), highlighting a widespread recognition of the need for increased awareness. Participants were asked whether they would donate the organs to individuals outside their family. Responses were divided, with 62 participants (18.75%) strongly agreeing and an equal number agreeing. However, a notable 31.25% (103) remained neutral, indicating uncertainty regarding this commitment. Regarding the belief that organ donation can save lives, a majority (56.25%, or 185 participants) strongly agreed, with 31.25% (103) agreeing. This indicates a strong perception of the life-saving potential of organ donation. Comfort with receiving another person's organ if needed received a more varied response; 124 respondents (37.5%) strongly agreed, while 31.25% (103) agreed. Nevertheless, some participants expressed discomfort, suggesting that while many recognize the necessity of organ donation, personal acceptance may vary. A small portion of respondents (12.5%) expressed a desire to receive money for their donation, reflecting ethical concerns regarding financial incentives in organ donation. However, 37.5% (124) were neutral, indicating uncertainty or ambivalence about this aspect of organ donation. Awareness being mandatory was agreed upon by 43.75% (144), with only a small percentage expressing disagreement. Furthermore, 50% (165) agreed that awareness significantly influences organ donation rates, underscoring the role of education and public information campaigns. Regarding the comfort level of donating organs solely to family, there responses indicated a division, with 62 participants (18.75%) strongly agreeing and 82 (25%) agreeing. Conversely, 31.25% (103) expressed neutrality, highlighting diverse perspectives on familial versus altruistic donations. Concerns about the potential misuse of donated organs were shared among 25% (82) of respondents who strongly agreed and another 31.25% (103) who agreed, signaling a need for transparency in the donation process. When asked if they had considered donating an organ, 18.75% (62) strongly agreed, while a significant portion remained neutral (31.25%). This suggests that while some individuals may have contemplated organ donation, many others have not yet seriously considered it. The notion of organ donation as a social commitment was acknowledged by 37.5% (124) who strongly agreed, indicating a belief in the ethical obligation to donate. Lastly, 25% (82) of participants strongly agreed that their religion permits organ donation, with a similar percentage remaining neutral, reflecting the complex interplay between personal beliefs and cultural norms surrounding organ donation.

#### IV. Discussion

Knowledge and attitudes regarding organ donation among interns and residents in tertiary care hospitals conducted as medical colleges in Karnataka, India, were studied by Shrivastav V (2024). The study found that although the majority of interns and graduate residents had adequate knowledge about organ donation, there were still gaps in their understanding. Interestingly, only 3.3% of interns and 14% of

postgraduates had registered for organ donation. This suggests that giving health care professionals proper education and training can increase their willingness to volunteer for organ donation.<sup>(11)</sup>

Knowledge, attitude, and willingness to donate organs were all examined in a study by Xiaoging Fan et al. (2022) among the general public. The mean score (+SD) for knowledge about organ donation was 6.50 +- out of 10 participants who were willing to donate, compared to 6.71 and 6.32 for those who were not. The majority of participants (80.35%) expressed a lack of knowledge on the donation process by disagreeing with the statement that organ removal should only be carried out after brain death has been established.<sup>(7)</sup>

## V. Conclusion

According to the study's findings, the degree of understanding relating organ donation in care giver visiting in KGMU OPD reveals that among 329 sample most of them 206 (62.61%) answered correctly while 123 (37.39%) answered wrong about the organ donation. The attitude of care givers regarding organ donation in terms of frequency and percentage. It reveals that majority of people 185 (56.25%) participants show neutral attitude while (25%) participants show negative attitude.

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