

A STUDY TO ASSESS THE KNOWLEDGE AND ATTITUDE REGARDING ORGAN DONATION AMONG COLLEGE STUDENTS IN SELECTED COLLEGE, JAIPUR WITH A VIEW TO DEVELOP AN INFORMATION BOOKLET

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ABSTRACT

The present study aimed to assess the knowledge and attitude regarding organ donation among college students in Jaipur. A descriptive research design was adopted to achieve the objectives. The sample comprised 100 college students, selected through simple random sampling technique. A structured questionnaire was used as the primary tool for data collection, covering demographic variables, knowledge, and attitude dimensions. The findings revealed that most of the students had moderate knowledge, while a positive attitude towards organ donation was observed among most participants. Statistical analysis indicated a significant association between knowledge levels and selected demographic variables such as age and educational background. The study concluded that although students demonstrated a favorable attitude, there is still a need to strengthen awareness programs to enhance their knowledge regarding organ donation. The results suggest the importance of integrating educational interventions to promote organ donation among the youth population.

Keywords: College students, organ donation, informational booklet, knowledge, attitude.

INTRODUCTION

Organ donation is the practice of recovering an organ from a live or deceased person and transplants it into the recipient who needs that organ. The person who wants to donate the organ called donor and transplanting into the body of recipient called as recipient body. Unfortunately, the need for organ donors is more than the number of people who donate.¹

In India, to promote the act of organ donation, national organ day was celebrated on 27th Nov, which was started in 2010 under the Ministry of Health & Family Welfare by the National Organ and Tissue Transplant Organization (NOTTO) until 2022. In 2023, the India organ donation day is shifted to 3rd of August, commemorating India's first successful deceased-donor heart transplant on August 3rd, 1994.³

Organ donation is a noble deed as it saves many lives and improves the quality of life of many more. However, there is a major shortfall in the availability of organs. This leads to potentially preventable death and morbidity in many people. Both living and deceased persons can donate organs. Damaged and nonworking organs because of injury or chronic diseases can be supplanted by giving organs, which will increase their life span and quality of life.⁶

In India, almost 500,000 people die every year due to non-availability of organs. Annually, 175,000 kidney patients, 50,000 heart patients, 50,000 liver patients, and 1 lakh corneal blind patients await transplant, but only 5000, 30, 700, and 25,000 donors are available, respectively. It is estimated that 1.5 lakh brain death occurs due to road traffic accidents (RTA) and if even 20% of them were to donate, all the requirements for organ transplantation in our country would be fulfilled.²

Process of organ donors are usually dead at the time of donation, but may be living. For living donors, organ donation typically involves extensive testing before the donation, including psychological evaluation to determine whether the would-be donor understands and consents to the donation. On the day of the donation, the donor and the recipient arrive at the hospital.⁴

For dead donors, the process begins with verifying that the person is undoubtedly deceased, determining whether any organs could be donated, and obtaining consent for the donation of any usable organs.

Lawfully, the donation of organs is authorized by the Government of India through the Transplantation of Human Organs Act of 1994.⁶

As per a research report, in comparison to 2021, India had reported 1137 more deceased organ transplants in kidney (759), liver (279) and heart (99), respectively. However, as per the Indian Ministry of Health's estimation, about 175,000 kidneys, 50,000 livers, hearts, and lungs, and 2,500 pancreases are needed to meet the demand. Rajasthan had performed 110 transplantations. Total

Donor from Rajasthan 47.⁵

According to all these statistics it is understood that the demand of organ donation is high because many people waiting for organ transplantation due to lack of organ donation rate. I have personally observed in hospitals during training periods that there is a great need for increasing organ donation rate and harnessing of donor organs because many people died due organ failure and do not receive organ transplantation at appropriate time. The shortage in organ rate is due to lack of awareness and correct knowledge among public, misconceptions, myths and beliefs surrounding organ donation due to religious and cultural barriers leading to hesitancy in donation of human organs. So there is a great need to create awareness among population about organ donation.

PROBLEM STATEMENT

“A study to assess the knowledge and attitude regarding organ donation among college students in selected college, Jaipur district, Rajasthan with a view to develop an information booklet.”

RESEARCH OBJECTIVES

- To assess the knowledge regarding organ donation among college students in selected college, Jaipur.
- To assess the attitude regarding organ donation among college students in selected college, Jaipur.
- To find out relationship between knowledge and attitude regarding organ donation among college students in selected college, Jaipur.
- To find out association between knowledge regarding organ donation among college students in selected college, Jaipur with their selected demographic variable.
- To find out association between attitude regarding organ donation among college students in selected college, Jaipur with their selected demographic variable.
- To develop an information booklet regarding organ donation.

MATERIAL AND METHODS

A quantitative research methodology with a descriptive research design was implemented in this study. The study was conducted in Agarwal P.G. College, Jaipur, Rajasthan with a sample size of 100 college students selected through simple random sampling technique. Data collection tools include a structured knowledge questionnaire to assess the knowledge of college students regarding organ donation and attitude scale (Likert scale) to assess the attitude of college students regarding organ donation. validated by experts, and reliability was established using the Kuder-Richardson (KR₂₁) method ($r = 0.73$). Necessary permission for the study and data collection was secured, and informed

consent was obtained from participants while ensuring their confidentiality and autonomy.

Specification of the instrument and related measurement

Tool- I: - Tool first consist of two sections

Section A:- socio-demographic variables of college students consist of 05 items (age, gender, level of education, religion and previous information)

Section B:- Section – B consist of structured questionnaire schedule to assess the existing level of knowledge regarding organ donation among college students in selected college of Jaipur.

The structured knowledge questionnaire consists with of 30 items. This section consists of questionnaire with items of multiple choice. Each question has four options, in which one option is correct answer and other option are incorrect. Every correct response is given a score of one and every unanswered or incorrect response is given score of zero. The maximum obtainable score is 30.

Tool-II: -

Structured attitude scale like Likert scale to assess attitude regarding organ donation among college student of selected college of Jaipur. In this total 15 statement 10 positive (1,4,5,6,7,8,11,12,13,15,) and 5 negatives (2,3,9,10,14) were included and each has five responses; strongly agree, agree, uncertain, disagree, strongly disagree in which one response was selected. Scoring for positive response statement for 1 to 5 and negative was from 5 to 1. The maximum obtainable score is 75.

RESULT

TABLE NO. 1

Description of socio demographic characteristics of college students

(N = 100)

S. N.	SOCIO- DEMOGRAPHIC VARIABLES	CATEGORIES	FREQUENCY (f)	PERCENTAGE (%)
1.	Age (year)	17 – 19	65	65.00
		20 – 22	30	30.00
		23 – 25	05	05.00
2.	Gender	Male	71	71.00
		Female	29	29.00
3.	Residential area	Urban	74	74.00
		Rural	26	26.00

4.	Religion	Hindu	71	71.00
		Muslim	29	29.00
		Christian	00	00.00
		Others	00	00.00
5.	Level of education	Under graduation	60	60.00
		Post graduation	31	31.00
		Others	09	09.00
6.	Previous information	Yes	56	56.00
		No	44	44.00

Table no.1 reveals that according to distribution of sample characteristics in relation to age the majority of responded i.e. 65 (65%) and 5 (5%) belonged to the age group of 23-25 year of age. According to gender the majority of responded i.e. 71 (71%) were male and 29(29%) were female. In relation to area of residence the majority of responded i.e. 74 (74%) belonged from urban area and 26(26%) were belonged from rural area. According to religion the majority of responded i.e. 71 (71%) were Hindu and 29(29%) were Muslim. In relation to educational status the majority of responded i.e. 60 (60%) have under graduation, and 09(09%) have other level of education. According to information about organ donation the majority of responded 56 (56%) represent yes in information about organ donation and 44(56%) represent no in information about organ information.

TABLE NO. 2

Frequency {f} and percentage (%) distribution of knowledge level regarding organ donation among college students.

(N = 100)

Level of knowledge	Criteria	Frequency (f)	Percentage (%)
Poor	0 - 10	13	13.00
Average	11 - 20	84	84.00
Good	21 - 30	03	03.00

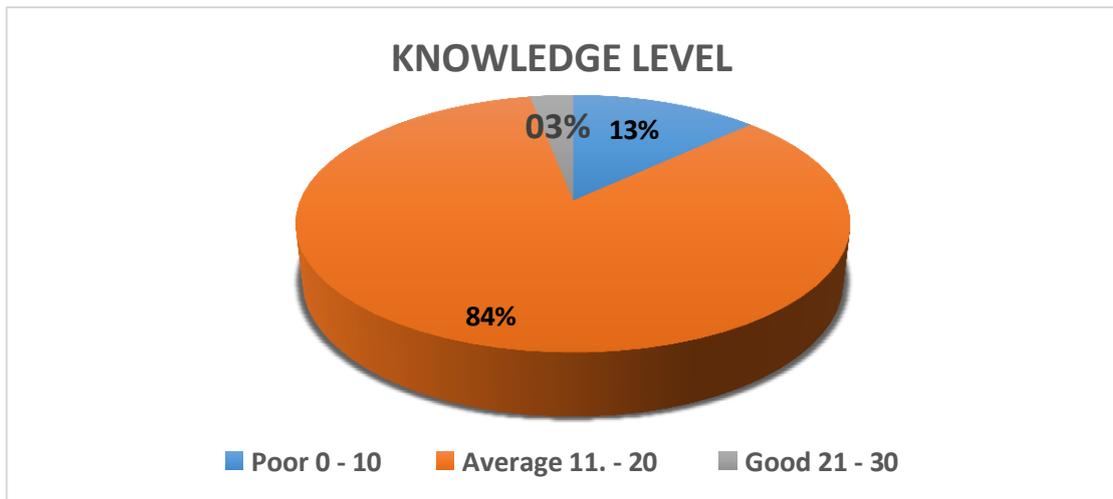


Table no. 2, figure 1, clearly represent that the level of knowledge of college students in terms of pre-decided categories majority of college students 84(84%) were found to have average level of knowledge whereas 03(03%) had good level of knowledge regarding organ donation and 13(13%) were found to possess the poor level of knowledge regarding organ donation.

TABLE NO. 3

Mean, Median, Mode, Mean percentage and Standard deviation of knowledge of college students regarding organ donation.

(N =100)

Area of knowledge	Max. Score	Mean	Mean percentage (%)	Median	Mode	Standard Deviation
Overall	30	14.32	47.7	14	13	3.15

Table no.3, represent that the maximum score, mean, median, mode, mean percentage and standard deviation of aspect of knowledge of college students regarding organ donation. The data in above table shows that mean score of participants 14.32, median 14, mode 13, mean percentage 47.7 and standard deviation 3.15 was obtained for knowledge regarding organ donation.

TABLE NO. 4

Frequency {f} and percentage {%} distribution of attitude level regarding organ donation among college students.

(N=100)

Level of attitude	Score	Frequency (f)	Percentage (%)
Positive	50 – 75	88	88.00
Negative	15 – 45	12	12.00
Total	75	100	100

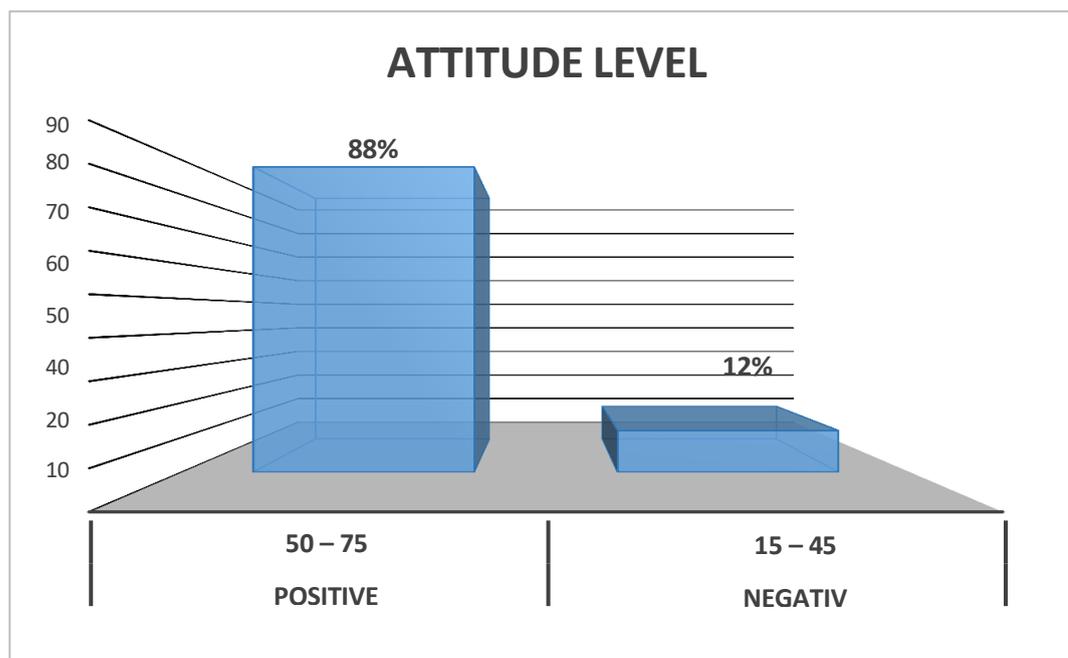


Table no. 4, figure 2, clearly represents that the attitude of college students in terms of pre-decided categories 88 (88%) of college students were found to have positive attitude and only 12(12%) were found to negative attitude regarding organ donation.

TABLE NO. 5

Mean, Median, Mode, Mean percentage and Standard deviation of attitude of college students regarding organ donation.

(N=100)

S.N.	Max. Score	Mean	Mean percentage (%)	Median	Mode	Standard Deviation
1.	75	51.5	68.6	52	52	8.23

Table no.5 represent that the maximum score, mean, median, mode, mean percentage and standard deviation of aspect of attitude of college students regarding organ donation. The data in above table shows that mean score of participants 51.5, median 52, mode 56, mean percentage 68.6 and standard deviation 8.23 was obtained for attitude regarding organ donation.

TABLE NO. 6

Relationship between knowledge and attitude regarding organ donation among college students.

(N=100)

Correlation value	Type of correlation	Tabulated value	Degree of freedom (N-2)	Level of significance	Result
0.17	Moderate degree positive	0.195	98	0.05	Not Significant relationship

Table no. 6, shows that, the Karl Pearson’s correlation coefficient value of 0.17 between the knowledge and attitude is found to be lower than tabulated value 0.19 for degree of freedom 98 at 0.05 level of significance. This clearly indicates that the relationship between the knowledge and attitude of college student’s regarding organ donation at the 0.05 level of significance is not significant by chance. It means both the variable not related to each other. Therefore, the researcher fails to rejects the null hypothesis (H_{01}).

TABLE NO: 7

Association between knowledge score and selected demographic regarding organ donation among college students

(N=100)

S.N	Socio-Demographic Variables and Categories	Frequency(f)	Knowledge score			Calculated Chi square value	Df	Tabulated value	LOS @ 0.05
			Good	Average	Poor				
1	Age (in years)								
	17 – 19	65	02	56	07	2.5	4	9.48	NS
	20 – 22	30	01	23	06				
	23 – 25	05	00	05	00				
	Total	100	3	84	13				
2	Gender								
	Male	71	03	58	10	1.60	2	5.99	NS
	Female	29	00	26	03				
	Total	100	03	84	13				
3	Residential area								
	Urban	74	03	61	10	1.19	2	5.99	NS
	Rural	26	00	23	03				
	Total	100	03	84	13				
4	Religions								
	Hindu	71	03	60	08	1.79	2	5.99	NS
	Muslim	29	00	24	05				
	Christian	00	00	00	00				
	Others	00	00	00	00				
Total	100	03	84	13					
5	Level of education								
	Under graduation	60	03	52	05	6.27	4	9.48	NS
	Post-graduation	31	00	26	05				
	Others	09	00	06	03				
	Total	100	03	84	13				
6	Previous information								
	Yes	56	03	48	05	4.02	2	5.99	NS
	No	44	00	36	08				
	Total	100	03	84	13				

S- significant

NS- Non-Significant

The study revealed that most college students had moderate knowledge and a positive attitude toward organ donation. Statistical analysis showed a significant relationship between knowledge and attitude, indicating that higher knowledge was associated with favorable attitudes. However, no significant association was found between knowledge and socio-demographic variables such as age, gender, residential area, religion, education, and previous information, suggesting these factors did not influence students' knowledge levels.

TABLE NO: 8

Association between attitude score and selected demographic regarding organ donation among college students.

(N=100)

S.N	Socio-Demographic Variables And Categories	Frequency (F)	Attitude Score		Calculated Chi square Value	Df	Tabulated Value	LOS @ 0.05
			Positive (46 – 75)	Negative (15– 45)				
1	Age (in years)				0.44	2	5.99	NS
	17 – 19	65	58	07				
	20 – 22	30	26	04				
	23 – 25	05	04	01				
	Total	100	88	12				
2	Gender				5.69	1	3.84	S
	Male	71	66	05				
	Female	29	22	07				
	Total	100	88	12				
3	Residential area				0.00	1	3.84	NS
	Urban	74	65	09				
	Rural	26	23	03				
	Total	100	88	12				
4	Religions				1.00	1	3.84	NS
	Hindu	71	61	10				
	Muslim	29	27	02				
	Christian	00	00	00				
	Others	00	00	00				
	Total	100	88	12				
	Level of education							
	Under graduation	60	54	06				

5	Post-graduation	31	26	05	0.73	2	5.99	NS
	Others	09	08	01				
	Total	100	88	12				
6	Previous information							
	Yes	56	48	08	0.62	1	3.84	NS
	No	44	40	04				
	Total	100	88	12				

S- significant

NS- Non-Significant

The study revealed that there was a significant association between the attitude of college students regarding organ donation and gender, indicating gender influenced students' attitudes. However, no significant association was found between attitude and other socio-demographic variables such as age, residential area, religion, level of education, and previous information. Thus, gender played a role, other demographic factors showed no influence on students' attitudes toward organ donation.

DISCUSSION

The present study revealed that most students had moderate knowledge and a positive attitude toward organ donation, which is consistent with findings from Pramod Kumar (2022), who reported 65% nursing students with moderate knowledge and 76% showing unfavorable attitudes. Similarly, Isirat Amin (2023) found 66% of students had average knowledge, while attitudes remained largely negative. In contrast, Gopal Kumar (2020) reported higher awareness among medical students with 85% willingness to donate organs. These variations highlight the influence of educational exposure and curriculum. Overall, findings indicate that students are willing but require structured awareness interventions.

CONCLUSION

The study identifies that most college students possessed moderate knowledge and a positive attitude toward organ donation. A significant relationship was found between knowledge and attitude, highlighting that increased awareness fosters favorable perceptions. However, knowledge showed no significant association with socio-demographic variables, and only gender influenced attitude. These findings indicate the need for structured educational programs and awareness campaigns to strengthen knowledge and dispel misconceptions, thereby motivating more students to support and participate in organ donation initiatives.

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