

Original Research Article

BRIDGING THE GAP: ASSESSING KNOWLEDGE, ATTITUDES, AND BARRIERS TO ORGAN DONATION AMONG PATIENT ATTENDANTS IN A TEACHING HOSPITAL

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ABSTRACT

Background: Organ donation is essential for saving lives, but in India, the gap between the demand and supply of organs is substantial. Public awareness remains limited, and cultural and social barriers often contribute to the hesitation toward organ donation. This study aimed to assess the knowledge, attitudes, and barriers to organ donation among patient attendants in a teaching hospital in Western Uttar Pradesh.

Materials and Methods: An observational cross-sectional study was conducted at a private medical college in Western Uttar Pradesh in September 2024. Patient attendants aged 18 years and above were selected through consecutive sampling. A predesigned, pretested, semi-structured interview schedule was used for data collection, focusing on knowledge, attitudes, and perceived barriers regarding organ donation. Descriptive statistics were applied, and associations between demographic factors and attitudes toward organ donation were assessed using SPSS.

Results: Among 247 participants, 88.7% were aware of organ donation, with 89.9% expressing willingness to donate. However, misconceptions persisted, as 51.8% understood the concept of brain death. Barriers included emotional discomfort and misconceptions about the process, though 100% expressed a desire for more information. A significant number (93.1%) showed a future intent to donate, with 78.9% willing to sign an organ donation pledge.

Conclusion: While the study revealed a high level of awareness and willingness to donate organs, there is a gap between intention and actual donation. The results emphasize the need for targeted educational campaigns to address misconceptions and promote active participation in organ donation programs.

Keywords: Organ Donation, Knowledge, Attitudes, Barriers, Teaching Hospital, Patient Attendants.

INTRODUCTION

Organ donation is a vital medical practice that has the potential to save lives, yet there remains a global shortage of organs available for transplantation. This issue is particularly acute in developing countries like India, where the demand for organs far exceeds the supply. Despite government efforts and public health initiatives aimed at raising awareness, there is a significant gap in public understanding and

acceptance of organ donation.^[1] Several factors contribute to this gap, including a lack of knowledge about the process, religious and cultural misconceptions, fears regarding the legal aspects of donation, and general mistrust in the healthcare system.^[2] India has one of the lowest organ donation rates in the world, and this is primarily due to the lack of awareness and hesitancy among the general population. The attitudes and beliefs held by individuals about organ donation are shaped by

multiple social, cultural, and religious factors, many of which are rooted in misunderstandings or misinformation. This issue is further complicated by perceived barriers such as distrust of the medical system, fear of organ trafficking, and concerns about the misuse of donated organs.^[3]

Social stigma remains a significant barrier to organ donation, with many patient attendants harboring negative perceptions about the process. These perceptions often arise from widespread myths and misconceptions. In many societies, there is a belief that donating organs after death is unnatural or even unethical. Some people fear that organ donation could lead to exploitation, particularly in societies where there is a high level of poverty or where corruption is a concern.^[4] This stigma is often perpetuated by media portrayals of organ donation that focus on illegal or unethical practices, thereby influencing the attitudes of the general public, including patient attendants. Additionally, the social stigma surrounding organ donation can result in the stigmatization of families who consent to donate the organs of their loved ones. Some patient attendants fear judgment from their communities or from extended family members, which further discourages them from considering organ donation as a viable option.^[4] These fears are rooted in cultural norms that prioritize the preservation of the body in its natural state, leading to resistance against the idea of organ donation.

Given the essential role that public perceptions play in improving organ donation rates, it is critical to assess and address these barriers in a systematic manner. This study will focus on understanding the knowledge, attitudes, and perceived barriers to organ donation among patient attendants in a teaching hospital setting. By exploring the perspectives of these individuals, we aim to uncover the specific challenges and opportunities that can inform more effective organ donation campaigns. Identifying gaps in knowledge and common misconceptions will allow for the development of culturally relevant education and outreach strategies that can improve public awareness, increase donation rates, and ultimately save more lives.

Aim:

To assess Knowledge, Attitudes, and Barriers to Organ Donation among patient attendants in a teaching hospital in Western Uttar Pradesh.

Objective:

1. To assess the knowledge and attitudes regarding organ and tissue donation among patient attendants in a teaching hospital in Western Uttar Pradesh.
2. To identify the barriers to organ donation perceived by patient attendants.

MATERIALS AND METHODS

An observational cross sectional study was conducted at a private medical college in Western Uttar Pradesh.

The study aimed to assess the knowledge, attitudes, and perceived barriers related to organ donation among patient attendants. The study population consisted of patient attendants accompanying patients to the hospital for medical consultations or treatments. The inclusion criteria for participation were as follows: patient attendants aged 18 years or older who provided informed consent to participate in the study and were present at the hospital during the data collection period. Attendants who were medical or healthcare professionals were excluded from the study, as their knowledge about organ donation could differ significantly from that of the general public. Additionally, attendants who refused to participate or withdrew their consent during the study were also excluded.

The data collection period spanned September 2024. Consecutive sampling was employed to select participants, and the sample size was calculated using the Cochran formula. Based on an estimated proportion of 11% from a study by Shrivastav V et al.,³ the minimum sample size was determined to be 150 patient attendants. After factoring in a 10% non-response rate, the final sample size was adjusted to 165 attendants. A predesigned, pretested, semi-structured interview schedule was used for data collection. The questionnaire included sections on demographic details, knowledge of organ donation, attitudes toward donation, perceived barriers, and suggestions for improvement. Interviews were conducted by trained data collectors who approached eligible patient attendants at the hospital. Prior to the interview, participants were fully informed about the purpose of the study, and informed consent was obtained. Confidentiality and anonymity of the participants were maintained throughout the study. Ethical clearance for the study was obtained from the Institute's Ethical Committee, ensuring that all research activities were in compliance with ethical guidelines for research involving human participants. Descriptive statistics, including percentages, means, and standard deviations, were used to summarize the data. Statistical tests were employed to assess associations between demographic variables such as age and education level, and knowledge or attitudes toward organ donation. A p-value of less than 0.05 was considered statistically significant. Data analysis was conducted using SPSS (Trial Version 25.0).

RESULTS

Among 247 study participants, the age distribution of the participants showed that the largest group was in the 30-39 years category, comprising 83 (33.60%). This was followed by the 20-29 years age group with 49 (19.84%) as shown in Figure 1. Other age groups included 40-49 years 41(16.60%), 50-59 years 35(14.17%), 60-69 years 18(7.29%), 10-19 years 15(6.07%), and 70-79 years 6(2.43%). Most participants were male, with 133 (53.85%), while 114 (46.15%) were female. The most common occupation

was housewife, with 50(20.24%). Other notable occupations included service worker 39(15.79%), agriculture worker 38(15.38%), and private job 31(12.55%). Other occupations included sales worker 31(12.55%), student 30(12.15%), and professional 1(0.40%). Regarding educational background, 58 (23.48%) had completed secondary education, followed by 47 (19.03%) who were graduates. Other education levels included higher secondary 35(14.17%), middle 33(13.36%), and just literate 25(10.12%). There were also 26 (10.53%) with primary education, and 19 (7.69%) were illiterate. Most of the participants were married, accounting for 203 (82.19%) participants. There were 38 (15.38%) participants who were single, while 1(0.40%) of participants were engaged to be married, 2(0.81%) were divorced, and 3(1.21%) were widowed. The religious breakdown of the participants showed that 138 (55.87%) identified as Hindu, 106 (42.91%) identified as Muslim, and 3 (1.21%) identified as Christian as shown in Table 1. Table 2 shows the knowledge, attitude, and practice of organ donation among participants where, in terms of knowledge, 219 (88.7%) participants were aware of organ donation, while 26 (11.3%) were not. When asked about the source of information, 63 (25.5%) participants reported learning about organ donation through the radio, while 45 (18.2%) cited health personnel as their source of information. Other sources included TV (26, 10.5%), newspapers (31, 12.6%), family and friends (14, 5.7%), and a combination of all these sources (66, 26.7%). All 247 participants (100%) were aware that people die due to the non-availability of organs. Regarding brain death, 128 (51.8%) understood its meaning, while 119 (48.2%) did not. In terms of willingness to donate an organ, 222 (89.9%) participants expressed their willingness, while 25 (10.1%) did not. When asked which organs can be donated, 109 (44.1%) identified kidneys, 65 (26.3%) mentioned eyes, and 32 (13%) referred to the liver. Additionally, 37 (15%) stated that all organs could be donated. When asked about organ donation from living or deceased persons, 108 (43.7%) said it could be from a living person, 67 (27.1%) mentioned deceased persons, and 72 (29.1%) thought it could be from both. All 247 participants (100%) expressed the need for more information on organ donation. Regarding attitude, 87 (35.2%) participants said they would donate their organs under special conditions, while 85 (34.2%) indicated they would think about it before donating. Additionally, 30 (12.1%) participants stated they would always donate, while 45 (18.2%) said they would never consider donation. In terms of who they would donate their organs to, 211 (85.4%) said they would donate to family members, 3 (1.2%) to colleagues, 6 (2.4%) to relatives, and 21 (8.5%) to friends. A small number, 6 (2.4%), said they would be willing to donate to anyone. In the practice category, only 2 (0.8%) participants reported having donated an organ in the

past, while the vast majority, 245 (99.2%), had not. However, 205 (83%) participants had donated blood in the past, and 42 (17%) had not. When asked about signing a pledge for organ donation, 195 (78.9%) participants expressed willingness, while 42 (21.1%) were not ready to sign such a pledge. Looking toward the future, 230 (93.1%) participants said they would like to donate organs, while 17 (6.9%) did not wish to donate in the future.

Figure 2 shows the participant's perceptions of barriers to organ donation. When asked whether their religion allows organ donation, all participants 247(100.0%) responded affirmatively, indicating that they believe their religion permits organ donation. However, when asked if they feel scared when thinking about organ donation, the responses varied. Most participants 185(74.90%) reported that they do not feel scared or apprehensive about organ donation, while a smaller portion 62(25.10%) expressed fear or discomfort at the thought of organ donation, highlighting a barrier related to emotional or psychological concerns despite the religious acceptance.

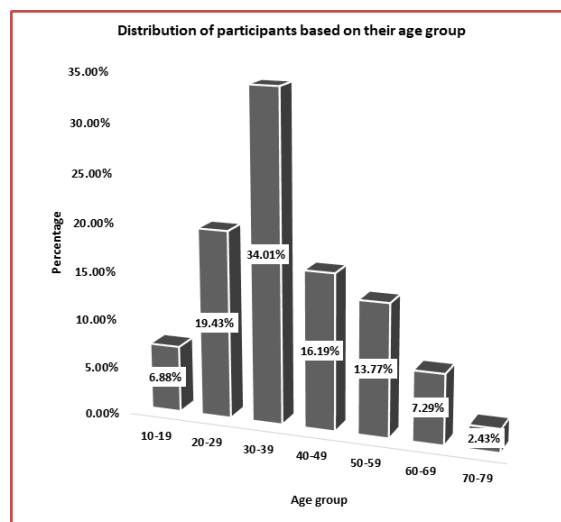


Figure 1: Distribution of participants based on their age group

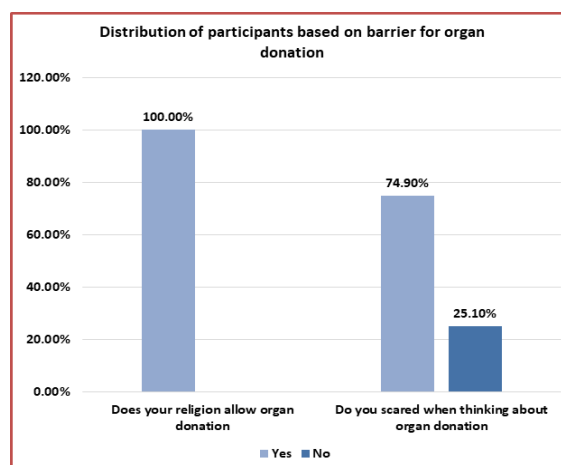


Figure 2: Distribution of participants based on barrier for organ donation

Table 1: Distribution of study participants based on socio-demographic characteristics

Socio-demographic characteristics		Frequency	Percentage
Age group	10-19 years	15	6.07%
	20-29 years	49	19.84%
	30-39 years	83	33.60%
	40-49 years	41	16.60%
	50-59 years	35	14.17%
	60-69 years	18	7.29%
	70-79 years	6	2.43%
Sex	Male	133	53.85%
	Female	114	46.15%
Occupation	Professional	1	0.40%
	Clerical	8	3.24%
	Sales worker	31	12.55%
	Agriculture worker	38	15.38%
	Service worker	39	15.79%
	Pvt job	31	12.55%
	Housewife	50	20.24%
	Student	30	12.15%
	Others	11	4.45%
	Driver	8	3.24%
Education	Illiterate	19	7.69%
	Just literate	25	10.12%
	Primary	26	10.53%
	Middle	33	13.36%
	Secondary	58	23.48%
	Higher secondary	35	14.17%
	Graduate	47	19.03%
	PG and above	4	1.62%
Marital status	Single	38	15.38%
	Married	203	82.19%
	Engaged to be married	1	0.40%
	Divorced	2	0.81%
	Widowed	3	1.21%
Religion	Islam	106	42.91%
	Hindu	138	55.87%
	Christianity	3	1.21%
Total		247	100.00%

Table 2: Distribution based on knowledge, attitude, and practice of organ donation among participants

Variables	Questions	Responses	Frequency (Percentage)
Knowledge	Aware of organ donation	Yes	219(88.7%)
		No	26(11.3%)
	Source of information	Tv	26 (10.5%)
		Radio	63(25.5%)
		Newspaper	31(12.6%)
		Family and friends	14(5.7)
		Health personnel	45(18.2%)
		All the above	66 (26.7%)
	Knowledge -people die because of non-availability	Yes	247(100%)
		No	0(0%)
	Do you know the meaning of brain death?	Yes	128(51.8%)
		No	119(48.2%)
	Would you be willing to donate an organ?	Yes	222(89.9%)
		No	25(10.1%)
	What organs can be donated?	Kidney	109(44.1%)
		Liver	32(13%)
		Eye	65(26.3%)
		Heart	4(1.6%)
		All the above	37(15.0%)
	Organ donation means removal of organs from?	Living person	108 (43.7%)
		Dead person	67(27.1%)
		Both	72 (29.1)
Attitude	Do you require more information?	Yes	247(100%)
		No	0(0%)
	Attitude towards donation of your own organs	Never	45(18.2%)
		In special condition	87(35.2%)
		Will think about it	85(34.2%)
		Always	30(12.1%)
	Who would you like to donate your organs to?	Family	211 (85.4%)
		Colleague	3 (1.2%)
		Relative	6 (2.4%)

Practice		Friend	21 (8.5%)
		Can be any one	6 (2.4%)
	Have you ever donated any organ in the past?	Yes	2(0.8%)
		No	245(99.2%)
	Have you donated blood in the past?	Yes	205(83%)
		No	42(17%)
	Will you be ready to sign a pledge for organ donation?	Yes	195(78.9%)
		No	42(21.1%)
	Would you like to donate in the future?	Yes	230(93.1%)
		No	17(6.9%)

DISCUSSION

Organ donation remains a critical healthcare issue globally, as the demand for organs continues to far exceed the available supply. Therefore, understanding the knowledge, attitudes, and barriers related to organ donation is essential, especially among patient attendants in teaching hospitals, who can significantly influence healthcare decisions. Research has highlighted several factors that shape individuals' perceptions and decisions about organ donation, including awareness, cultural beliefs, and social influences.

In terms of knowledge, the current study found that 88.7% of participants were aware of organ donation, which is consistent with findings from a study in a public hospital in Delhi, India. The study by Sachdeva et al,^[1] also reported a high level of awareness 74.9 % among hospital visitors about organ donation. However, both studies highlight that there are gaps in understanding, particularly regarding the concept of brain death. In the current study, only 51.8% understood brain death, and a similar finding was observed in a study by Joe et al,^[5] where misconceptions and lack of awareness were prevalent among hospital attendants in South India. The percentage of individuals who recognized brain death as the threshold for organ donation can thus be seen as a critical area for education.

The willingness to donate, reported as 89.9% in the current study, aligns with attitudes observed in other research, such as the study by Vincent et al in India,^[6] where a significant number of participants expressed openness to organ donation. However, while the willingness is high, barriers remain, such as personal beliefs and misconceptions about organ donation. A notable study by Anwar et al,^[4] from Bangladesh highlighted the prevalence of negative attitudes towards organ donation, especially in relation to deceased donation, which resonates with findings from the current study where some participants expressed uncertainty about whether donation could be from living or deceased individuals.

The current study identified diverse sources of information, with radio, health personnel, and TV being prominent. This is similar to findings from Abbas et al,^[7] in Pakistan, where health professionals played a key role in spreading awareness about organ donation. However, the current study revealed that 100% of participants expressed a desire for more information, which highlights a common theme in various studies, including that of Symvoulakis et al,^[8]

who also found a significant demand for further education on organ donation. Barriers to organ donation in the current study, such as misconceptions and insufficient information, are in line with broader studies like those conducted by Saleh et al,^[9] in Malaysia, where knowledge gaps and negative perceptions about the organ donation process were identified as major obstacles.

The results of the current study on attitudes toward organ donation provide valuable insights that are consistent with findings from similar research across different regions. In terms of willingness to donate, 35.2% of participants indicated they would donate under special conditions, while 34.2% stated they would consider it before donating. This reflects findings from Sarveswaran et al,^[10] in Puducherry, India, where a significant portion of participants had a positive attitude toward organ donation but also expressed conditions or hesitation before making a decision. Similarly, Saleem et al,^[11] in Pakistan found that participants were generally willing to donate, but they preferred to discuss it with family members first. When it comes to donation preferences, the current study found that 85.4% of participants would donate to family members, with a smaller percentage willing to donate to friends, colleagues, or strangers. This pattern of donating primarily to family members is consistent with findings by Sachdeva et al,^[2] who observed a similar trend among hospital visitors in Delhi, India, further supporting the strong familial connection when it comes to organ donation.

Regarding actual donation behavior, only 0.8% of participants in the current study had donated an organ, while 83% had donated blood. This discrepancy between willingness and actual practice has been observed in other studies as well. For instance, Babaie et al,^[12] noted that while there was general awareness and positive attitudes toward organ donation among healthcare workers, the actual rate of organ donation remained low. Similarly, El Hangouche et al,^[13] found that despite widespread awareness, actual participation in organ donation programs was still limited.

Looking toward the future, 93.1% of participants in the current study expressed a desire to donate organs, which aligns with the findings of Khan et al,^[14] who reported a similar high level of intention to donate, though practical and emotional barriers often hindered the process. Furthermore, when asked about signing an organ donation pledge, 78.9% of participants expressed willingness, which contrasts

the findings of Wong et al,^[15] where an only 5.5% of participants registered to be organ donar.

CONCLUSION

In conclusion, while the general trend toward increased awareness and willingness to donate organs is evident across these studies, there remains a significant gap between attitude and actual participation. This suggests a need for more effective educational programs and interventions to bridge this gap and encourage not only awareness but also active participation in organ donation.

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