

Assessment of Knowledge and Attitude Towards Organ Donation Among Healthcare Professionals in Selected Hospitals, Asansol, West Bengal

Mrs. Swati Sinha

Assistant Professor, Nursing Department, Misra Nursing Institute of Asansol, Asansol, India

DOI: <https://doi.org/10.51244/IJRSI.2026.1308000031>

Received: 15 August 2026; Accepted: 20 August 2026; Published: 01 September 2026

ABSTRACT

Background: Organ donation can provide life-saving transplantation for people with end-stage organ failure, yet the supply of deceased donor organs remains inadequate. Healthcare professionals have an important role in informing patients and families and in supporting organ donation. This study assessed knowledge and attitude towards organ donation among healthcare professionals in selected hospitals in Asansol, West Bengal.

Methods: A quantitative descriptive survey design was used. The study included 140 healthcare professionals selected by systematic random sampling. The final study was conducted at Health world Hospital, Asansol, from 23 December 2025 to 18 January 2026. Data were collected through an e-questionnaire containing a semi-structured demographic questionnaire, a 25-item structured knowledge questionnaire, and the standardised 45-item Attitude Towards Organ Donation Scale (ATODS). Descriptive statistics, Pearson correlation and chi-square tests were used.

Results: Most participants were aged 26–50 years (83.57%), female (74.29%), registered nurses (75.00%), and had ≤ 10 years of experience (79.29%). The majority (80.00%) had no mass-media exposure about organ donation, 70.71% had never cared for an organ donor/recipient, and 92.14% had not given consent for organ donation. The mean knowledge score was 15.50 ± 3.53 , with 79.29% demonstrating moderate knowledge. The mean attitude score was 118.30 ± 22.01 , and 90.71% had a high level of positive attitude. Knowledge and attitude showed a weak positive correlation ($r=0.144$), which was not statistically significant ($t=1.72$, $df=138$, $p>0.05$). Knowledge was significantly associated with working experience ($\chi^2=11.94$, $p=0.002$) and mass-media exposure ($\chi^2=8.50$, $p=0.01$). Attitude was significantly associated with age ($\chi^2=11.80$, $p=0.01$) and gender ($\chi^2=7.27$, $p=0.02$).

Conclusion: Healthcare professionals demonstrated predominantly moderate knowledge and a high level of positive attitude towards organ donation. Targeted education, clinical awareness activities and organisational support may help strengthen knowledge and translate positive attitudes into informed advocacy and donation-related practice.

Keywords: organ donation; knowledge; attitude; healthcare professionals; nursing; organ transplantation;

INTRODUCTION

Organ donation involves the transfer of an organ or tissue from a donor to a recipient to save life or improve quality of life. Organ transplantation has become an important treatment for severe and end-stage organ failure. However, the increasing demand for transplantable organs continues to exceed the available supply. The dissertation reports that India has a particularly low deceased organ donation rate despite a substantial transplant burden. It also identifies limited awareness, myths and misconceptions, religious and cultural concerns, legal and ethical issues, and inadequate coordination as barriers to deceased organ donation.

Healthcare professionals are strategically positioned to improve awareness because they interact with patients and families and can provide accurate information about donation, brain death, consent and transplantation.

Previous studies cited in the dissertation have reported variable levels of knowledge but generally favourable attitudes among healthcare students and professionals. For example, studies from India have identified gaps in legal knowledge, brain-death awareness, donor registration and practical aspects of organ donation, despite relatively positive attitudes.

The present study therefore focused on healthcare professionals in selected hospitals in Asansol, West Bengal, with the aim of assessing their knowledge and attitude towards organ donation and examining the relationship between knowledge and attitude and their association with selected demographic characteristics.

Objectives

- To assess the level of knowledge towards organ donation among healthcare professionals.
- To determine the level of attitude towards organ donation.
- To determine the relationship between level of knowledge and attitude towards organ donation.
- To determine the association between level of knowledge towards organ donation and selected demographic variables.
- To determine the association between level of attitude towards organ donation and selected demographic variables.

MATERIALS AND METHODS

Research design and setting

A quantitative research approach with a descriptive survey design was adopted. The pilot study was conducted at NRS Medical College & Hospital, Kolkata. The final study was conducted at Health world Hospital, Asansol, West Bengal. The setting was selected on the basis of familiarity, feasibility, administrative approval, anticipated cooperation, and accessibility of participants.

3.2 Population, sample and sampling

Tool	Measure	Format
Tool I	Demographic variables	8-item semi-structured e-questionnaire
Tool II	Knowledge towards organ donation	25-item self-generated structured questionnaire
Tool III	Attitude towards organ donation	45-item standardized ATODS

The study population comprised healthcare professionals working in hospitals in Asansol. The sample consisted of 140 healthcare professionals. The calculated sample size was approximately 132 and was increased to 140 for the present study. Systematic random sampling was used. Participants included Post Graduate Trainee doctors, staff nurses and nursing in-charges who were willing to participate and present on the day of data collection; healthcare professionals on long leave were excluded.

Data collection instruments

The demographic questionnaire covered age, gender, marital status, profession, working experience, mass-media exposure about organ donation, previous care of an organ donor/recipient, and prior consent for organ donation. Knowledge was categorised using the study mean ± 1 SD. The ATODS categorised scores of 80–180 as high positive attitude, 50–79 as moderate positive attitude, and below 49 as negative attitude.

Validity and reliability

The self-generated demographic and knowledge tools were developed after review of research and non-research literature and consultation with experts. Content validity of the demographic questionnaire was established by nine experts. The structured knowledge questionnaire demonstrated split-half reliability with Pearson correlation $r=0.87$. The standardised ATODS demonstrated Cronbach's alpha of 0.725 and standardised-item alpha of 0.737. The ATODS was pretested among 12 healthcare professionals and was reported to be clear and understandable.

Ethical considerations and data collection

Ethical clearance was obtained from the ethics committee and administrative permissions were obtained from the relevant authorities of Health world Hospital, Asansol,. Participants were informed about the purpose, duration, voluntary nature, potential harm/benefit, confidentiality and anonymity of the study, and informed consent was obtained. The pilot study was conducted from 09 December 2025 to 14 December 2025. The final data collection was conducted from 23 December 2025 to 18 January 2026 using an e-questionnaire distributed through WhatsApp or email. The average response time was approximately 20–30 minutes.

Data analysis

Data were organised in a master sheet and analysed using descriptive and inferential statistics. Frequency and percentage were used for demographic variables; mean, median and standard deviation were used for knowledge and attitude scores; Pearson correlation was used to assess the relationship between knowledge and attitude; and chi-square tests were used to determine associations with selected demographic variables. Statistical significance was assessed at the 0.05 level.

RESULTS

Participant characteristics

Characteristic	n	%
Age ≤ 25 years	18	12.86
Age 26–50 years	117	83.57
Age > 50 years	5	3.57
Male	36	25.17
Female	104	74.29
Married	74	52.86
Unmarried	66	47.14
Registered nurse	105	75.00
Working experience ≤ 10 years	111	79.29
Working experience > 10 years	29	20.71
Mass-media exposure: Yes	28	20.00
Mass-media exposure: No	112	80.00

Previously cared for donor/recipient: Yes	41	29.29
Previously cared for donor/recipient: No	99	70.71
Already consented to organ donation: Yes	11	7.86
Already consented to organ donation: No	129	92.14

Knowledge towards organ donation

Knowledge level	Score	n	%
Adequate	>19	14	10.00
Moderate	12–19	111	79.29
Inadequate	<12	15	10.71

The mean knowledge score was 15.50, the median was 16, and the standard deviation was 3.53. Most healthcare professionals (79.29%) had moderate knowledge.

Attitude towards organ donation

Attitude level	Score	n	%
High positive attitude	80–180	127	90.71
Moderate positive attitude	50–79	10	7.14
Negative attitude	<49	3	2.14

The mean attitude score was 118.30, the median was 121, and the standard deviation was 22.01. A high level of positive attitude was observed in 90.71% of participants.

Relationship between knowledge and attitude

Variable	Mean	SD	r	t	Interpretation
Knowledge	15.50	3.53	0.144	1.72	Weak positive, not significant
Attitude	118.30	22.01			

Outcome	Variable	χ^2	p value	Finding
Knowledge	Age	5.91	0.20	Not significant
Knowledge	Profession	3.35	0.18	Not significant
Knowledge	Working experience	11.94	0.002	Significant

Knowledge	Mass-media exposure	8.50	0.01	Significant
Knowledge	Previous donor/recipient care	2.61	0.27	Not significant
Attitude	Age	11.80	0.01	Significant
Attitude	Gender	7.27	0.02	Significant
Attitude	Profession	1.43	0.48	Not significant
Attitude	Working experience	4.56	0.01	Reported as not significant in dissertation
Attitude	Previous donor/recipient care	1.94	0.37	Not significant

There was a weak positive correlation between knowledge and attitude ($r=0.144$). The computed t value of 1.72 was lower than the table value of 1.96 at $df=138$ and the 0.05 significance level; therefore, the relationship was not statistically significant.

Associations with demographic variables

The dissertation's interpretation reports significant associations of knowledge with working experience and mass-media exposure, and significant associations of attitude with age and gender. The source table reports $\chi^2=4.56$ and $p=0.01$ for working experience and attitude while comparing it with a χ^2 table value of 5.99; because the dissertation text explicitly interprets this association as not statistically significant, this manuscript retains the source interpretation rather than recalculating or correcting it.

DISCUSSION

The study found that the majority of healthcare professionals had moderate knowledge but a highly positive attitude towards organ donation. This combination suggests that favourable attitudes may exist even when knowledge is not uniformly adequate. The finding is consistent with several studies cited in the dissertation. Ghose et al. reported fair or moderate knowledge among many medical and nursing students together with a predominantly positive attitude. Shrivastav et al. similarly reported high overall knowledge but important gaps in brain-death awareness and practical engagement. Studies from India have also identified persistent gaps in legal, ethical and donor-registration knowledge despite favourable attitudes.

In the present study, 80% of participants reported no mass-media exposure about organ donation and 92.14% had not already given consent for donation. This difference between positive attitude and actual prior consent is important because willingness expressed on a scale may not always translate into concrete donation-related action. The dissertation's KAP framework emphasises that knowledge, attitude and practice are interconnected, while the practice component was not measured in the present study.

Knowledge was associated with working experience and mass-media exposure. This indicates that professional exposure and information access may influence knowledge levels. Attitude was associated with age and gender in the study. These findings support the need for educational strategies that consider professional experience and information exposure while also recognising that attitudes may be shaped by demographic and personal factors.

The weak positive correlation between knowledge and attitude was not statistically significant. Thus, although knowledge and attitude moved in the same direction, the relationship was not strong enough to demonstrate a statistically significant association in this sample. This finding reinforces the importance of addressing not only

factual knowledge but also beliefs, misconceptions, cultural concerns and opportunities for practical engagement.

CONCLUSION

The study identified predominantly moderate knowledge and a high level of positive attitude towards organ donation among healthcare professionals in the selected Kolkata hospital setting. Knowledge was significantly associated with working experience and mass-media exposure, while attitude was associated with age and gender according to the study's reported interpretations. The weak positive relationship between knowledge and attitude was not statistically significant. The findings support strengthening structured education, awareness programs, clinical guidance and institutional support so that healthcare professionals can provide accurate counselling and become informed advocates for organ donation.

Implications for Nursing

Nursing practice: Develop clinical guidance for care of organ donors and recipients; educate patients and families while addressing misconceptions; and provide culturally sensitive support throughout the donation process.

Nursing education: Incorporate organ donation, ethical considerations, legislation and communication into nursing curricula and organise workshops or inter-professional training for students and faculty.

Nursing administration: Organise in-service education and health-education programs and integrate clear policies, protocols and legal guidance on organ donation into hospital systems.

Nursing research: Conduct larger studies, investigate specific knowledge gaps, examine cultural and personal influences on attitudes, evaluate educational interventions, and explore nurses' role as advocates for organ donation.

Limitations

The study was conducted in a limited hospital setting and may not represent healthcare professionals across different departments, institutions, experience levels or geographic areas. The e-questionnaire limited opportunities to explore participants' reasoning in depth. Self-administered responses may also have been influenced by social desirability, particularly for positive attitudes and willingness to donate.

REFERENCES

1. Tanna H, Patel H, Patel P, Patel G, Kumar D. Knowledge and Attitude Toward Organ Donation Among Interns and Residents in a Tertiary Care Hospital in Gujarat, India. *Cureus*. 2023;15(8):1-11. doi:10.7759/cureus.43797.
2. Issac A, Devi S, Khan A, Padhi I, Mitra M, Dey M, et al. Knowledge, attitude, willingness, and factors influencing organ donation decision making in India. *International Journal of Community Medicine and Public Health*. 2025;12:374-381. doi:10.18203/2394-6040.ijcmph20244046.
3. Ragupathy S, Sadasivam K, Thirumalai Raju P, Kanagaraj TS, Ayyavoo S. Assessing Knowledge and Attitudes Regarding Organ Donation among Medical Students in South India: A Cross-Sectional Study. *Journal of Pharmacy and Bioallied Science*. 2024;16:S4503-S4506. doi:10.4103/jpbs.jpbs_1026_24.
4. Shrivastav V, Murugan Y, Gandhi R, Nagda J. Knowledge, Attitudes, and Practices Regarding Organ Donation Among Medical Students in India: A Mixed Methods Study. *Cureus*. 2024;16(3):1-10. doi:10.7759/cureus.56136.
5. Kshtriya PS, Anchala R. Knowledge, Attitude, and Practice of Organ Donation and Transplantation among Students of Health Sciences in a Private College in Pune: A Cross-sectional Study. *Indian Journal of Transplant*. 2023;17(4):436-442. doi:10.4103/ijot.ijot_39_23.
6. Nagari A, Muppur A, Hanumanthu L, Uppu B. Assessment of Knowledge and Attitudes Towards Organ Donation Among Undergraduate Medical Students: A Cross-Sectional Study. *International Journal of Academic Medicine and Pharmacy*. 2023;5(6):859-864. doi:10.47009/jamp.2023.5.6.179.

7. Parija S, Chakraborty K, Sahu DP. A study on knowledge, attitude, and practice about eye donation among medical students and healthcare professionals at a tertiary hospital in Eastern India. *Indian Journal of Ophthalmology*. 2023;71(11):3513-3520. doi:10.4103/IJO.IJO_2554_22.
8. Sachdeva S. Organ donation in India: Scarcity in abundance. *Indian Journal of Public Health*. 2017;61(4):299-301. doi:10.4103/ijph.IJPH_230_16.
9. Syiemlieh B, Obangkokla O, Khatun M, Joshi P, Latha T, Rani JR, et al. Knowledge, Attitude and Willingness Towards Organ Donation among People Attending Out Patient Departments of a Tertiary Care Hospital, West Bengal: A Cross-sectional Study. *Journal of Caring Science*. 2025;14:31-36. doi:10.34172/jcs.025.31865.
10. Krishna E, Debbarma S, Ranjan A, Pandey S, Kumar V, Kumar V, et al. Knowledge and Attitudes Toward Organ Donation Among Students and Professionals in Medical Colleges in the Eastern Part of India. *Cureus*. 2024;16(9):1-14. doi:10.7759/cureus.70556.