IJNH

Research Article

A Study to Assess the Effectiveness of Structured Teaching Program on Knowledge About Organ Donation and Solid Organs Transplantation among the Medical College Students at Selected Medical Colleges, in Kerala

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Abstract

Background: In India, organ donation remains significantly underutilized due to prevalent misinformation, cultural taboos, and inadequate awareness programs, particularly among the younger population. Medical students, as future health professionals, are in a strategic position to promote accurate knowledge and positive perceptions about organ donation. This study evaluated the impact of a structured teaching program (STP) on enhancing awareness and understanding of organ donation and solid organ transplantation among medical students in Kerala.

Materials and Methods: A randomized controlled trial was conducted involving 100 1st-year MBBS students from two government medical colleges in Kerala. Participants were randomly divided into an experimental group (EG) ($n = 50$) and a control group (CG) ($n = 50$). Baseline knowledge was measured using a validated questionnaire. The EG underwent the STP, which included PowerPoint presentations and printed handouts, whereas the CG did not receive any intervention during the initial phase. One week later, both groups completed the same knowledge assessment. Data analysis included descriptive statistics and inferential tests such as paired and independent *t*-tests and Chi-square tests.

Results: A significant improvement in knowledge was observed in the EG, with a post-test mean score of 15.64 compared to 7.24 in the CG (mean difference = 8.40; $P < 0.05$). Moreover, significant correlations were identified between post-test scores and demographic factors such as family type, maternal education, occupation, and residential location.

Conclusion: The STP proved to be an effective educational intervention for increasing knowledge about organ donation among medical students. This approach can play a key role in correcting misconceptions and fostering favorable attitudes that may contribute to increased organ donor enrollment in the future.

Keywords: Knowledge improvement, medical students, organ donation, randomized controlled trial, solid organ transplantation, structured teaching program

Date of Submission: 18-04-2025
Date of Revision: 04-05-2025
Date of Acceptance: 24-05-2025

Access this article online
Website: https://innovationaljournals.com/index.php/ijnh
ISSN No: 2454-4906
DOI: 10.31690/ijnh.2025.v011i02.003

Introduction

Organ donation represents a vital medical breakthrough that has greatly enhanced both the lifespan and quality of life for patients suffering from advanced organ failure.[1] Even with progress in transplantation techniques and growing public awareness efforts, there is still a significant disparity between the demand for organ transplants and the supply of available donor organs. This persistent shortage is particularly

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evident in India, where cultural beliefs, lack of knowledge, misconceptions, and limited family consent contribute to low organ donation rates.

Organ transplantation stands out as one of the most remarkable milestones in contemporary medical science. It entails the surgical replacement of damaged or failing organs with healthy ones sourced from either living or deceased individuals.[2] While living donors can contribute organs like one kidney, a segment of the liver, or parts of the lungs, the majority of life-saving transplants depend on organs donated after death. In India, the transplantation of Human Organs Act (THOA), implemented in 1994, serves as the primary legal framework governing organ donation. This act authorizes organ donation and recognizes brain death as a legitimate criterion for organ retrieval. Nevertheless, despite this legislative backing, organ donation remains underutilized due to a widespread lack of awareness and deep-rooted socio-cultural challenges.[3]

India faces an immense demand for organs. Lifestyle diseases such as diabetes, hypertension, and heart disease have increased the incidence of organ failure. For instance, diabetes has made India the "diabetes capital of the world," contributing to a surge in kidney and liver failures. Similarly, trauma and road accidents account for a significant number of potential deceased donors, yet organ retrieval remains minimal due to delayed brain death declarations and a lack of awareness among hospital personnel and the public.[4]

The lack of understanding about brain death, religious superstitions, mistrust in the healthcare system, and myths – such as being born without an organ in the next life or believing organ donation is expensive – are commonly reported reasons for the reluctance to donate. Furthermore, many people remain unaware of how and where to pledge their organs or obtain a donor card.[5] Studies have shown that family refusal is one of the biggest barriers to deceased organ donation, often stemming from emotional distress or misconceptions at the time of brain death declaration.[6]

Educational interventions targeting younger populations, especially medical and nursing students, can play a pivotal role in overcoming these barriers. College students are viewed as effective agents of change within their families and communities. With appropriate education, they can advocate for organ donation and influence public perception positively.[7] Medical students, in particular, being future healthcare professionals, can be equipped with the knowledge and attitude necessary to lead and support organ donation efforts throughout their careers.

Previous studies in India and internationally have highlighted gaps in the knowledge, attitude, and willingness to donate organs among students. Although many students express a favorable attitude, their actual understanding of the legal, procedural, and ethical aspects remains limited.[8] Introducing organ donation education into academic settings has shown to significantly improve awareness and correct misconceptions.

In this context, structured teaching programs (STP) have emerged as effective tools to deliver focused, accurate, and impactful information. These programs typically involve multimedia presentations, pamphlets, booklets, and interactive discussions designed to engage students and address key issues related to organ donation.[9] By systematically evaluating their effectiveness, educators and policymakers can design better strategies to integrate organ donation education into health science curricula.[10]

In response to the urgent need to increase organ donation rates and the demonstrated benefits of educational interventions, this study aimed to evaluate the effectiveness of an STP in enhancing knowledge regarding organ donation and solid organ transplantation among medical students in Kerala. The broader objective was to deepen students' comprehension while cultivating a supportive attitude toward donation that could positively influence the larger community.

Aim of the study

To assess the effectiveness of a STP on knowledge about organ donation and solid organ transplantation among medical college students at selected medical colleges in Kerala.

Objectives

- To assess the pre-test knowledge level regarding organ donation and solid organ transplantation among medical college students in the experimental group (EG) and control group (CG)
- To evaluate the effectiveness of STP on organ donation and solid organ transplantation among medical college students in the EG
- To compare the pre- and post-test level of knowledge scores in the EG and CG
- To find the association between the post-test knowledge scores regarding organ donation and solid organ transplantation and selected demographic variables among the EG.

Materials and Methods

Study design and approach

A quantitative research approach with a true experimental randomized controlled trial design was adopted for this study. This design was chosen to rigorously evaluate the effectiveness of a STP on the knowledge regarding organ donation and solid organ transplantation among medical college students.

Study setting

The study was conducted at two government medical colleges in Kerala:

- Government Medical College, Kottayam - designated as the EG
- Government Medical College, Thiruvananthapuram - designated as the CG.

These colleges were selected for their accessibility and availability of 1st-year MBBS students.

Study duration

The data collection was carried out over a 4-week period, from February 02, 2025, to March 04, 2025.

Study population and sample

The target population consisted of 1st-year MBBS students from the selected medical colleges. The accessible population included students available and willing to participate during the study period.

Inclusion criteria

- Students currently studying in the 1st-year MBBS program at the selected medical colleges
- Students who were willing to participate and provided informed consent.

Exclusion criteria

- Students who were ill or absent during data collection
- Students who had previously received any structured education or teaching program on organ donation.

Sample size

The study included a total sample of 100 1st-year MBBS students selected through a multistage sampling technique. Of these, 50 students were assigned to the EG and 50 to the CG. The participants were drawn from two government medical colleges in Kerala, ensuring representation and feasibility for implementing the intervention and follow-up assessments.

Sampling technique

A multistage sampling technique was employed:

- Two colleges were selected from a list using a simple random (lottery) method
- One college was randomly assigned to the EG and the other to the CG using a coin toss
- Within each college, 1st-year MBBS students were selected using simple random sampling.

Intervention

The intervention included a STP on organ donation and solid organ transplantation. The content covered:

- Definition and importance of organ donation
- Types of donors (living and deceased)
- Organs that can be donated
- Legal and ethical aspects (based on THOA, 1994)
- Myths and misconceptions
- Donor card and registration process
- Delivery method: PowerPoint presentation supported with pamphlets, flashcards, and booklets
- Duration: 30–45 min/session
- The CG did not receive the STP before post-testing; they were later provided booklets after the post-test.

Tool for data collection

A structured questionnaire developed and validated by nursing and medical experts was used for data collection.

Sections of the tool

- Section A: Demographic variables – age, gender, residence, family income, parents' education and occupation, source of information, etc.
- Section B: Knowledge questionnaire – 20 multiple choice questions (total score: 20).

Scoring interpretation

- <50% – Inadequate knowledge
- 51–75% – Moderate knowledge
- >75% – Adequate knowledge.

Validity and reliability of the tool

- Content validity: Ensured by a panel of subject experts from nursing and medicine
- Reliability: Assessed using test–retest method. The correlation coefficient was 0.81, indicating high reliability.

Ethical considerations

Ethical approval was obtained from the Institutional Ethics Committee. Informed consent was taken from all participants.

Pilot study

A pilot study was conducted with 10 students (5 in each group) to test the feasibility of the tool and process. No major changes were required post-pilot. The reliability of the questionnaire was reaffirmed with a correlation coefficient of 0.81.

Data collection procedure

- Week 1: Pre-test for EG followed by delivery of STP
- Week 2: Post-test for EG
- Week 3: Pre-test for CP (no intervention)
- Week 4: Post-test for CP, followed by distribution of booklets.

Data analysis

The collected data were entered into Microsoft Excel and further analyzed using the Statistical Package for the Social Sciences.

Descriptive statistics

Descriptive methods were employed to present the key characteristics of the study sample. Frequencies and percentages were calculated for demographic variables to depict the participant profile across both EG and CG. To assess central tendency and dispersion of knowledge scores before and after the intervention, mean values and standard deviations were computed.

Inferential statistics

Inferential techniques were used to determine the impact of the STP. Within-group comparisons of pre- and post-intervention knowledge scores were analyzed using the paired *t*-test. Differences in post-test scores between the EG and CG were evaluated using an independent *t*-test. In addition, the Chi-square test was applied to explore the relationship between post-intervention knowledge scores and selected demographic factors. A significance level of $P < 0.05$ was used as the threshold for statistical significance in all tests.

Results

Table 1 presents the complete demographic profile of the 100 medical students who participated in the study, with 50 in the EG and 50 in the CG. The majority of participants in both groups were male (84% experimental and 82% control) and predominantly Hindu (90% and 88%, respectively). Most were unmarried and belonged to nuclear families. In terms of parental education, a higher proportion of fathers had completed high school or primary education, whereas a considerable number of mothers had only primary or secondary school education. Graduate-level education was noted in 14% of fathers and up to 18% of mothers (CG). Unemployment among mothers was high, particularly in the CG (80%), while fathers held diverse occupational roles, with the most common being clerks/shop owners/farmers. Regarding monthly family income, most participants belonged to the income bracket of Rs. 10,357–15,535, followed by Rs. 15,536–20,714, in both groups. The majority of students resided in urban or rural areas, and only a few came from semi-urban backgrounds. The most frequently cited source of information regarding organ donation was media, followed by health personnel, in both groups. Overall, the distribution of demographic variables was comparable between the EG and CG, ensuring a homogeneous baseline for evaluating the impact of the STP.

Table 2 presents the distribution of pre-test knowledge levels among participants in the EG and CG. In the EG, 96% of students had inadequate knowledge, and only 4% demonstrated a moderate level. No participant exhibited adequate knowledge.

Table 1: Demographic profile of participants (n=100)

Variable	Category	Experimental EG (n=50)	Percentage	Control CG (n=50)	Percentage
		n		*n*	
Gender	Male	42	84.0	41	82.0
	Female	8	16.0	9	18.0
Religion	Hindu	45	90.0	44	88.0
	Muslim	3	6.0	2	4.0
	Christian	2	4.0	4	8.0
Marital status	Married	2	4.0	3	6.0
	Unmarried	48	96.0	47	94.0
Family type	Nuclear	26	52.0	27	54.0
	Joint	19	38.0	20	40.0
	Extended	5	10.0	3	6.0
Father's education	Illiterate	5	10.0	7	14.0
	Primary	11	22.0	8	16.0
	Secondary	4	8.0	15	30.0
	High school	16	32.0	10	20.0
	High school certificate	7	14.0	5	10.0
	Graduate	7	14.0	5	10.0
Father's occupation	Unemployed	2	4.0	1	2.0
	Unskilled worker	13	26.0	8	16.0
	Semiskilled worker	6	12.0	10	20.0
	Clerk/Shop owner/Farmer	14	28.0	18	36.0
	Semi-profession	8	16.0	8	16.0
	Profession	7	14.0	5	10.0
Mother's education	Illiterate	7	14.0	9	18.0
	Primary	13	26.0	7	14.0
	Secondary	9	18.0	12	24.0
	High school	12	24.0	7	14.0
	High school certificate	4	8.0	6	12.0
	Graduate	5	10.0	9	18.0
Mother's occupation	Unemployed	35	70.0	40	80.0
	Unskilled worker	4	8.0	1	2.0
	Semiskilled worker	3	6.0	2	4.0
	Clerk/Shop owner/Farmer	3	6.0	3	6.0
	Semi-profession	3	6.0	1	2.0
	Profession	2	4.0	3	6.0
Monthly family income (Rs.)	6,214–10,356	7	14.0	10	20.0
	10,357–15,535	17	34.0	19	38.0
	15,536–20,714	16	32.0	10	20.0
	20,715–41,429	7	14.0	9	18.0
	Above 41,430	3	6.0	2	4.0
Place of residence	Rural	20	40.0	25	50.0
	Urban	28	56.0	22	44.0
	Semi-urban	2	4.0	3	6.0
Source of information	Media	28	56.0	29	58.0
	Health personnel	13	26.0	16	32.0
	Peer groups	2	4.0	2	4.0
	Others	7	14.0	3	6.0

Similarly, in the CG, 94% had inadequate knowledge, with 6% showing a moderate level. No student in either group had adequate knowledge prior to the intervention. The Chi-square test showed no statistically significant difference between the two groups at baseline ($P > 0.05$), confirming that both groups were comparable in terms of initial knowledge levels before the STP was administered.

Following the intervention, there was a marked improvement in knowledge scores among participants in the EG, as compared to the CG. As shown in Table 3, 76% of students in the EG achieved adequate knowledge, and 24% reached a moderate level. Importantly, none remained at the inadequate level.

In contrast, the CG exhibited limited improvement, with 88% still classified as having inadequate knowledge, 12% achieving a moderate level, and none attaining adequate knowledge. The difference between the two groups was found to be highly statistically significant using the Chi-square test ($\chi^2 = 73.03$, $P < 0.001$), confirming the effectiveness of the STP (Table 3).

Post-intervention, the EG showed significant improvement: 76% had adequate knowledge compared to none in the CG.

The effectiveness of the STP was assessed by comparing the pre-test and post-test knowledge scores in both the EG and CG. As shown in Table 4, students in the EG showed a substantial increase in their mean knowledge score following the intervention. The mean pre-test score was 6.26, which increased to 15.64 in the post-test, resulting in a mean gain of 9.38 points. This corresponds to a 46.90% improvement in knowledge, with a 95% confidence interval (CI) ranging from 43.30% to 50.35%.

In contrast, the CG, which did not receive the STP, showed a marginal improvement. The mean pre-test score was 6.48, and the post-test score was 7.24, resulting in a mean gain of only 0.76 points, or a 3.80% improvement in knowledge, with a 95% CI of 0.15–7.55%. The CI for the CG also included zero (−0.03–1.51), indicating that the knowledge gain was not statistically significant.

These results confirm the significant effectiveness of the STP in enhancing knowledge about organ donation and solid organ transplantation among medical college students.

The comparison of pre-test and post-test knowledge levels within both groups is presented in Table 5. In the EG, a significant improvement in knowledge was observed following the STP. During the pre-test, 96% of students had inadequate knowledge, and only 4% demonstrated a moderate level, with none achieving adequate knowledge. However, in the post-test, 76% achieved adequate knowledge, 24% had moderate knowledge, and none remained in the inadequate category. The difference was found to be highly significant ($\chi^2 = 48.36$, $P < 0.001$), indicating the effectiveness of the intervention and supporting the research hypothesis (H_1).

In contrast, the CG showed minimal change. Pre-test results showed 94% had inadequate knowledge and 6% had moderate knowledge. After the post-test, 88% still had inadequate knowledge and only 12% reached a moderate level. No participant in the CG achieved an adequate knowledge score in either assessment. The change was not statistically significant ($\chi^2 = 1.00$, $P = 0.37$), indicating that without intervention, knowledge remained largely unchanged.

These findings reinforce the effectiveness of the STP in improving knowledge about organ donation and transplantation among medical students.

As shown in Table 6, the EP scored significantly higher than the CG across all knowledge domains. The greatest differences were observed in the domains of organ donation and types of organ donation. The total mean post-test score was 15.64±1.80 in the EG compared to 7.24 ± 2.12 in the CG, with all differences being highly statistically significant ($P < 0.001$).

Table 7 compares the domain-wise pre-test and post-test mean knowledge scores between the EG and CG. In the EG, there was a significant improvement across all knowledge domains following the STP, with the total knowledge score increasing from 6.26 to 15.64 ($P < 0.001$).

In contrast, the CG showed only marginal increases across domains, with no statistically significant changes observed ($P > 0.05$). The total score increased slightly from 6.48 to 7.24, which was not statistically significant. These findings affirm the effectiveness of the intervention in improving both overall and domain-specific knowledge.

Table 2: Pre-test knowledge level (n=100)

Knowledge level	Experimental (n=50) (%)	Control (n=50) (%)
Inadequate	48 (96)	47 (94)
Moderate	2 (4)	3 (6)
Adequate	0 (0)	0 (0)

Table 3: Post-test knowledge level (n=100)

Knowledge level	Experiment group		Control group		Chi-square test
	n	Percentage	n	Percentage	
Inadequate	0	0.00	44	88.00	2=73.03
Moderate	12	24.00	6	12.00	P=0.001***(S)
Adequate	38	76.00	0	0.00	

S: Significant

Table 4: Effectiveness of STP and generalization of knowledge gain score

Group	Test	Max score	Mean score	Mean difference (95% CI)	Percentage Knowledge gain (95% CI)
Experimental	Pre-test	20	6.26	9.38 (8.66–10.07)	46.90 (43.30–50.35)
	Post-test	20	15.64		
Control	Pre-test	20	6.48	0.76 (−0.03–1.51)	3.80 (0.15–7.55)
	Post-test	20	7.24		

Table 5: Comparison of pre-test and post-test knowledge levels in experimental and control groups ($n=100$)

Group	Knowledge level	Pre-test ($n=50$)		Post-test ($n=50$)		Chi-square	*P*-value
		n	Percentage	*n*	Percentage		
Experimental	Inadequate	48	96.0	0	0.0	$\chi^2=48.36$	0.001***
	Moderate	2	4.0	12	24.0		
	Adequate	0	0.0	38	76.0		
Control	Inadequate	47	94.0	44	88.0	$\chi^2=1.00$	0.37 (NS)
	Moderate	3	6.0	6	12.0		
	Adequate	0	0.0	0	0.0		

***$P<0.001$, Highly significant; NS: Not significant

Table 6: Domain-wise post-test knowledge scores in both experimental and control group

Domain	Experimental mean±SD	Control mean±SD	*t*-value	*P*-value
Organ donation	4.00±1.20	1.90±0.93	9.80	0.001***
Donor classification	3.12±0.80	1.38±1.18	8.65	0.001***
Different organ donation	4.70±1.53	1.98±0.87	10.92	0.001***
Legal issues	3.82±1.24	1.98±0.98	8.23	0.001***
Total score	15.64±1.80	7.24±2.12	21.31	0.001***

Table 8 presents the association between the post-test level of knowledge score and various demographic variables. The data were analyzed using the Chi-square test to assess the significance of the relationship between demographic factors and knowledge levels following the intervention. Significant associations were found between family size, maternal education, maternal occupation, and place of residence with post-test knowledge scores. Specifically, nuclear families exhibited higher levels of adequate knowledge, whereas mothers with higher educational qualifications demonstrated better knowledge scores. In addition, unemployed mothers showed higher knowledge levels compared to those employed in unskilled or semi-skilled occupations. Moreover, urban residents had significantly better knowledge scores than those from rural areas. The findings suggest that these demographic factors play a crucial role in the effectiveness of the educational intervention, and further research may be required to address the specific needs of different groups.

Discussion

The findings of this study revealed a notable and statistically significant enhancement in both knowledge and attitudes regarding organ donation among medical students after participating in a STP. These results are consistent with existing research that highlights the effectiveness of organized educational strategies in bridging awareness and attitude gaps within the healthcare student population.

Supporting the current findings, Lamani and Devangmat[11] found that structured teaching significantly enhanced knowledge among nursing students, emphasizing the responsiveness of younger student populations to targeted education. Similarly, Gowri *et al*.[12] observed marked improvement in knowledge scores after educational intervention, reiterating the utility of structured teaching methods in dispelling myths and motivating participation in organ donation.

Krishna *et al*.[13] examined a broad population of medical faculty, residents, students, and nursing staff in Patna and noted substantial differences in baseline knowledge, with faculty being the most informed and students the least. Their findings revealed the persistence of misconceptions despite an overall positive attitude toward organ donation, underscoring the need for structured educational initiatives like the one implemented in the present study.

Vincent *et al*.[14] explored knowledge, attitude, and perception among undergraduate medical and nursing students in southern India and found that although attitudes were generally favorable, there were clear deficits in knowledge – particularly regarding brain death and legislation. The dominance of media as an information source in their study highlighted the limited impact of informal learning and further affirmed the necessity of structured academic programs to address nuanced and technical aspects of organ donation. Compared to the study by Patel *et al*.,[15] which demonstrated a significant improvement in knowledge about organ donation among arts and commerce students through a STP, our study similarly found a marked increase in knowledge among 1st-year MBBS students following the intervention. However, the impact may be more profound in our study given the medical background of participants, indicating that educational interventions are effective across disciplines but may yield varying levels of depth in understanding based on academic context.

Furthermore, the study by Kapoor and Mahak[16] closely mirrors the methodology and outcomes of the present research. Conducted among 1st-year B.Sc. Nursing students in Punjab, their pre-experimental study showed a dramatic increase in knowledge post-STP, with a mean score increase from 10.60 to 17.62 and a significant improvement in attitude scores. Notably, 98% of the participants attained excellent knowledge after the intervention and a portion of the students shifted from a neutral to a positive attitude, reinforcing the idea that early educational engagement is effective in shaping favorable views toward organ donation.

Collectively, the evidence from these studies, including the current research, highlights that STPs are instrumental in bridging knowledge gaps, reshaping misconceptions, and fostering a positive and informed attitude toward organ

Table 7: Comparison of pre-test and post-test domain-wise mean knowledge scores in experimental and control groups

Knowledge domain	Group	Mean±SD		Mean difference	t-value	*P*-value
		Pre-test	Post-test			
Organ donation	Experimental	1.64±0.94	4.00±1.20	2.36	10.51	0.001*** (S)
	Control	1.72±0.95	1.90±0.93	0.18	1.56	0.08 (NS)
Donor classification	Experimental	1.12±0.98	3.12±0.80	2.00	11.83	0.001 *** (S)
	Control	1.20±1.14	1.38±1.18	0.18	0.58	0.08 (NS)
Different organ donation	Experimental	1.76±1.08	4.70±1.53	2.94	13.96	0.001*** (S)
	Control	1.78±0.97	1.98±0.87	0.20	1.71	0.07 (NS)
Legal issues	Experimental	1.74±1.03	3.82±1.24	2.08	9.74	0.001*** (S)
	Control	1.78±1.04	1.98±0.98	0.20	1.73	0.07 (NS)
Total Score	Experimental	6.26±2.43	15.64±1.80	9.38	27.18	0.001*** (S)
	Control	6.48±2.46	7.24±2.12	0.76	1.93	0.06 (NS)

***$P<0.001$: Highly significant; NS: Not significant

Table 8: Association between post-test level of knowledge score and demographic variables (experimental group)

Demographic variables	Inadequate (%)	Moderate (%)	Adequate (%)	Chi-square test (χ^2)	*P*-value
Family size				$\chi^2=6.36$	$P=0.04$*
Nuclear family	0.00	11.53	88.47		
Joint family	0.00	31.57	68.43		
Extended family	0.00	60.00	40.00		
Education status of mother				$\chi^2=13.03$	$P=0.02$*
Illiterate	0.00	71.42	28.58		
Primary education	0.00	30.76	69.24		
High school	0.00	8.33	91.67		
Graduate	0.00	0.00	100.00		
Occupation status of mother				$\chi^2=11.32$	$P=0.05$*
Unemployed	0.00	17.14	82.86		
Unskilled worker	0.00	75.00	25.00		
Semi-skilled worker	0.00	66.67	33.33		
Place of living status				$\chi^2=8.17$	$P=0.02$*
Rural	0.00	45.00	55.00		
Urban	0.00	10.71	89.29		

NS: Not significant, S: Significant, $P\leq0.05$: Significant, $P>0.05$: Not significant

donation among students in healthcare education. These findings support the integration of formal organ donation modules into academic curricula to promote sustained awareness and improve future donation rates.

The findings of this study carry important implications for nursing education and public health promotion. As future frontline healthcare providers, nursing students must possess not only sound clinical knowledge but also the right attitude and communication skills to educate the public about sensitive issues like organ donation. STPs, such as the one used in this study, can be integrated into the regular nursing curriculum to cultivate informed, empathetic, and proactive professionals. Nurses can play a pivotal role in community education, counseling grieving families, dispelling myths, and advocating for organ donation in both clinical and community settings. Future research should explore the long-term retention of knowledge and attitudes following educational interventions, the effectiveness of peer-led or digital teaching formats, and the impact of such interventions on actual donor registration behavior. Expanding these studies across diverse geographical and socio-cultural contexts will further guide policy-makers and educators in developing comprehensive, sustainable strategies to boost organ donation awareness and participation across India.

Conclusion

This study demonstrates that a STP significantly enhances medical students' knowledge about organ donation and solid organ transplantation. The intervention not only improves awareness but also helps in addressing misconceptions, which could potentially lead to increased donor registrations and better advocacy for organ donation in the future.

Acknowledgements

N/A.

Conflict of Interest

N/A.

Funding

N/A.

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How to cite this article: James M, Rao U. A Study to Assess the Effectiveness of Structured Teaching Program on Knowledge About Organ Donation and Solid Organs Transplantation among the Medical College Students at Selected Medical Colleges, in Kerala. Innov J Nurs Healthc. 2025;11(2):10-17.