

Enhanced perioperative communication elevates patients' understanding, perception, and satisfaction for anesthesia services: Insights from a survey study

ABSTRACT

Background and Aims: Anesthesiologists' services extend to many critical areas of any healthcare setup. However, there needs to be more understanding among the public regarding their crucial role. Preanesthesia evaluation (PAE) visits can disseminate information about anesthesiologists and services. We aimed to evaluate patient's knowledge and the impact of interview-based surveys on increasing knowledge about anesthesiologists and anesthesia services.

Methodology: It was a single-center, cross-sectional survey involving 550 patients aged 18–65 undergoing elective surgeries. Pre- and postoperative interviewer-assisted questionnaires were administered to assess patients' baseline knowledge and perception of anesthesia and anesthesiologists. Statistical analysis focused on demographic, educational, and previous anesthesia exposure among subgroups; a P -value <0.05 was considered significant.

Results: Less than half comprehended anesthesia's role as a specialist in inducing unconsciousness. 55.3% were unaware of general anesthesia, and 69.6% were unaware of regional anesthesia as a technique. Higher education and previous anesthesia exposure correlated with better awareness with regard to the perioperative role of anesthesiologists and their fields of work ($P < 0.05$). The postoperative survey indicated good satisfaction with anesthesiologists' services, which might be attributable to the survey-based interaction.

Conclusion: A significant need for more understanding regarding anesthesia and anesthesiologists' roles still prevails. Interview-based effective communication during PAE visits, perioperative period, and shared decision-making (SDM) improves patients' knowledge, comprehension, and satisfaction.

Key words: Anesthesia, communication, comprehension, perception, satisfaction

Introduction


In the contemporary healthcare landscape, the role of anesthesiologists transcends traditional perioperative boundaries, encompassing critical care, resuscitation, pain

management, and palliative care services.^[1] Despite the expanding scope of this medical speciality, there persists a pervasive undervaluation and misunderstanding among

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the general population about the crucial role played by anesthesiologists, particularly among individuals needing more familiarity, education, or medical training.^[2] Studies have disclosed that even in developed countries, the public needs knowledge of anesthesiologists' expertise, role, and multifaceted functions, both within and beyond the confines of the operating room.^[3,4] Some studies from developing countries have underscored the prevalence of poor knowledge and misconceptions regarding the role of anesthesiologists, especially among older individuals and those with lower socioeconomic status.^[5] Studies conducted in India have also shown a slower pace of progress in rectifying these misconceptions, and anesthesiologists are often wrongly perceived as mere assistants to surgeons, responsible solely for inducing and awakening patients from surgical slumber.^[6]

Anesthesiologists usually have limited patient interactions and often do not explain the crucial aspect of anesthesiologists' roles in the perioperative period to improve their clinical outcomes. In our recently established National Teaching Institute, located in a rural enclave of eastern India, where most of our served population is economically poor and limited in educational opportunities, these misconceptions might be even more pronounced. Therefore, this survey was designed to evaluate patients' understanding of anesthesia as a medical speciality and their perspectives on the roles of anesthesiologists during the perioperative period. We used an interview-based interactive session during the preanesthesia evaluation (PAE) clinic visit, which aimed to determine variations in perceptions regarding the anesthesiologist's role concerning age, gender, educational background, and previous anesthesia experiences. Furthermore, we sought to assess the impact of our perioperative education by collecting patients' feedback regarding the provision of anesthesia services and the practices of anesthesiologists within our institute, during the postoperative period.

Methodology

It was a single-centered, cross-sectional, investigative survey conducted after obtaining the Institute's Ethical Committee approval and registering it under the Clinical Trials Registry of India (CTRI/2023/10/058203). All patients aged 18–65 who were planned for elective surgeries were included in this study. Patients posted for daycare surgery, emergency surgeries, those with psychiatric conditions, those unable to communicate or comprehend, or those who refused to participate were excluded from the study. Our team members were fluent in English, Hindi, Bangla, and local languages, that is, Bhojpuri, and patients were helped with the survey

and interview within these languages. Only filled forms were included, and incomplete forms were considered dropouts.

Two separate sets of questionnaires were prepared by investigators, in which the first set recorded patients' responses before surgery and the other after surgery. The preoperative questionnaire set comprised 20 multi-choice semi-closed-ended questions and was designed in three sections: demographic profile, knowledge and perception about anesthesia, and anesthesiologist's role in the perioperative period [Appendix I]. The questionnaire was first piloted with 20 selected participants who had come for a PAE. The participants were asked to report if they had any difficulty understanding the questions or response options, and appropriate modifications were made based on their feedback. The questionnaire was in English, and no formal translation was performed to any other language; however, the interviewer helped the participants understand it. The time required to fill it was also noted. Data from these responses were not included in the final analysis. It was then sent to five subject external experts with at least 10 years of experience for validation, and changes were made per their suggestions. By average and universal agreement, the scale-level content validity index was 0.93 and 0.83, respectively. The postoperative questionnaire set contained five questions, each measuring response, based on the 5-point Likert scale (1 = strongly disagree to 5 = strongly agree) [Appendix II].

Informed consent was obtained from all participants after a detailed explanation of the study objectives, the nature of the survey, and the voluntary nature of their participation. They were also assured of the confidentiality of their responses that communication was performed in their native language only. The preoperative questionnaire responses were collected during the patient's first visit to the PAE clinic before evaluation for anesthesia. Anesthesiologists recorded patients' responses to the preoperative questionnaire set in Google Forms as per their answers. No other person was allowed to help the patient complete the survey.

A standard procedure was followed for all the patients who were posted for surgery. The anesthesiologist introduced himself and conversed with the patients during PAE, on the evening before surgery, in the preoperative room, inside the operation theater (OT), during transfer to the postanesthesia care unit (PACU), and in the PACU. Throughout the perioperative period, the anesthesiologist meticulously communicated to the patients every step of anesthetic care. Patients were made to feel engaged in a shared decision-making (SDM) process based on their values, preferences, and previous anesthesia experiences,

which reassured them of our roles directed toward the best available quality of care services. On the first postoperative day (POD-1), the anesthesiologist, not involved in patients' care before and during the surgery, met the patients in the ward, inquired about their general well-being, and recorded their responses to the postoperative questionnaire after responding to their issues if they had any. This set of questionnaires aimed to gauge participants' perspectives on various aspects related to anesthesia and perioperative care and included assessing apprehensions about being anesthetized for surgery, the role of anesthesiologists in creating a reassuring environment and involvement in SDM during perioperative care, increased understanding of the significance of anesthesiology as a medical speciality, perceptions regarding services provided by anesthesiologists, and the importance of establishing familiarity with their anesthesiologist before undergoing any procedure.

A survey conducted in northern Jordan by Bataineh *et al.*^[1] found that the total knowledge of anesthesiologists' role could have been better in 51% of patients. We used this finding for an infinite population and 95% confidence interval, giving us a sample size of 384. Taking into account the nonrandomized sampling, we added a design effect of 1.4 and the sample size was calculated to be 538. Considering the possibilities of minimal dropout, we rounded off to 550 for final recruitment.

The data from Google Forms were transcribed into a Microsoft Excel sheet, and statistical analysis was conducted using MedCalc software. Similar responses to a question were grouped and then expressed as a proportion of the total population. The median (interquartile range (IQR)) was used to represent Likert scale scores, whereas Chi-square tests were used to compare the responses between the two groups. A *P*-value less than 0.05 was considered statistically significant.

Results

A total of 550 patients were included in the preoperative survey. The study flowchart showing participant recruitment through analysis is represented in Figure 1. The sample population's mean age was 33.98 ± 17.30 years, of which 280 (50.91%) were males and 270 (49.09%) were females. 194 (35.27%) were educated up to higher secondary school, and 43.82% had prior exposure to anesthesia [Table 1].

Only 39.6% of participants understood anesthesia as inducing unconsciousness, and 62.9% were unable to express concerns about being anesthetized. Almost 11.5% of participants were

Table 1: Demographic profile

Parameters	Sub-parameters	Number (%) (n=550)
Age	18–30 years	152 (27.64)
	31–40 years	117 (21.27)
	41–50 years	164 (29.82)
	51–60 years	79 (14.36)
	61–65 years	38 (6.91)
Gender	Male	280 (50.91)
	Female	270 (49.09)
Education	Illiterate	83 (15.09)
	Below graduates	317 (57.64)
	Graduates and above	150 (27.27)
Occupation	Farmer	48 (8.73)
	Housewife	231 (42.00)
	Students	56 (10.81)
	Business	43 (7.82)
	Others	172 (31.27)

apprehensive about feeling pain. Alarming, more than half (55.3%) of participants could not express any of the general anesthesia techniques, even in their language, and the same was true for 69.6% of patients for regional anesthesia techniques. Similarly, 64.4% were unfamiliar with anesthesia complications, with 19.6% citing prolonged unconsciousness as the most common adverse event. Anesthesiologists as specialist doctors were recognized by only 47.09% of the population. The distinct roles of anesthesiologists in the OT and during the entire perioperative role were recognized by 32.26% and 20.73% of participants, respectively, and more than half of participants did not know about the doctor who is responsible for maintaining their respiration and hemodynamics during surgery. Patients with prior anesthetic exposure and higher educational status had statistically significant knowledge regarding the role of anesthesiologists ($P < 0.05$).

Most participants (58.36%) had no idea about the workplace of anesthesiologists, and a notable percentage (35.82%) believed anesthesiologists work solely in the OT, with minimal recognition (5.28%) of their distinguished role in critical care and pain management. The patients' educational status was the only independent variable that had a significant impact on the recognition of the fields of work of anesthesiologists ($P < 0.05$) [Tables 2-4]. Over 25% of patients with prior exposure to anesthesia expressed a preference to meet exclusively with the surgeon before undergoing any surgical procedure. No statistically significant difference was observed when comparing participants' age and gender ($P > 0.05$).

Of these 550 patients, 396 (72%) patients who underwent surgery participated in the postoperative survey. The median (IQR) Likert scale score for patients' satisfaction

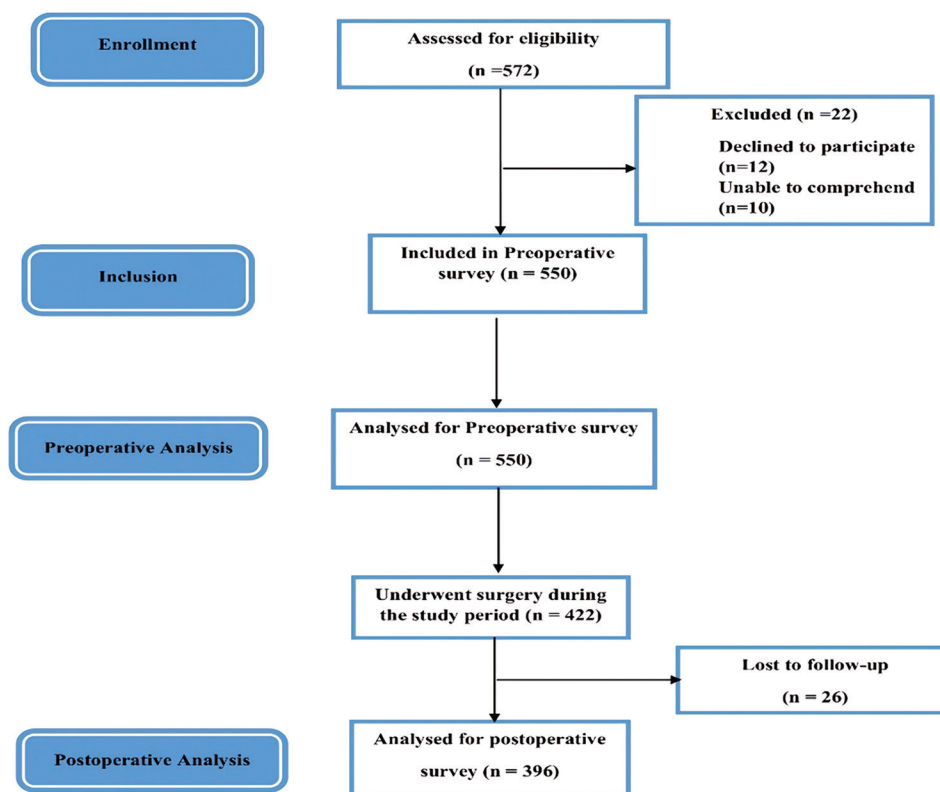


Figure 1: Study flow chart

regarding the services provided by anesthesiologists and the importance of compulsory discussion on the availability and scope of services provided by anesthesiologists was 4 (5–4). Similarly, the median rating of the survey in enhancing knowledge on the importance of anesthesiology as a medical speciality and improving perception toward services provided by anesthesiologists was also 4 [Table 5].

Discussion

The present study sheds light on the knowledge and perception of patients regarding anesthesia and anesthesiologists. While the findings reiterate a concerning lack of understanding among a significant proportion of patients, they also show hope for improving awareness of anesthesia and the role of anesthesiologists utilizing the PAE clinic visit as an opportunity to interact with the patients beyond just clinical evaluation for fitness for a planned surgery. Our study revealed insignificant differences in participants' knowledge and perceptions based on age and gender. However, individuals with previous exposure to anesthesia and those with higher educational attainment, such as graduates and above, demonstrated a statistically better understanding of anesthesiologists' roles and responsibilities. Nevertheless, despite many participants

having undergone previous anesthesia exposure (43.8%), awareness of anesthesia techniques and associated complications remained limited. After incorporating a survey-based interaction, our postoperative survey findings indicate a positive impact on knowledge, perception, and satisfaction, indicating that anesthesiologists should take this opportunity without failing to boost the impact. Furthermore, such interaction aids SDM, and patients get more involved with their care.

Education level emerged as one of the factors influencing comprehension, with illiteracy and low educational level contributing to little awareness regarding anesthesiologists being specialist doctors and the critical perioperative functions performed by them, as observed in a previously conducted Indian study.^[7] Studies have revealed that a population with higher levels of education exhibits a heightened awareness of anesthesiologists as specialist doctors.^[8,9]

The persistence of limited understanding among the public regarding the role of anesthesiologists, as evidenced by our study findings, consistent with studies conducted more than a decade earlier,^[10,11] emphasizes the disturbing lack of improvement regarding the perception of anesthesiologists among the general

Table 2: Cohort perceptions about anesthesiologist and anesthesia services

Questions	Answers	Total (n=550)
Who is an anesthesiologist?	No idea	244 (44.36)
	Specialist doctor	259 (47.09)
	Technician/assistant	47 (8.55)
What is the role of an anesthesiologist in operation theater?	No idea	255 (46.36)
	Administer drugs only	133 (24.19)
	Anesthetized and monitored the patient	162 (29.45)
What is your idea on the relationship between surgeon and anesthesiologist?	No idea	283 (51.45)
	The surgeon performs his job under the anesthesiologist's order	13 (2.36)
	The anesthesiologist performs his job under the surgeon's order	76 (13.83)
Do anesthesiologists stay throughout the procedure?	Each has different roles	178 (32.36)
	No idea	291 (52.91)
	No	8 (1.45)
Who is responsible for maintaining your breathing during the surgery?	Maybe	83 (15.09)
	Yes	168 (30.55)
	No idea	328 (59.64)
Who is responsible for maintaining your pulse and blood pressure during the surgery?	Surgeon	89 (16.18)
	Anesthesiologist	120 (21.82)
	Both	13 (2.36)
Who is responsible for maintaining your pulse and blood pressure during the surgery?	No idea	310 (56.36)
	Surgeon	125 (22.74)
	Anesthesiologist	96 (17.45)
Who is responsible for pain relief during the surgery?	Both	19 (3.45)
	No idea	292 (53.09)
	Surgeon	114 (20.73)
During which period is the role of the anesthesiologist important?	Anesthesiologist	93 (16.91)
	All including nurse	51 (9.27)
	No idea	265 (48.18)
What are the different places where an anesthesiologist works in a hospital?	Either before, during, or after surgery	171 (31.09)
	During all three stages	114 (20.73)
	No idea	321 (58.36)
Would you like to meet an anesthesiologist/surgeon before undergoing surgery?	Only operation theater or pain clinic or ICU	200 (36.36)
	OT plus other places such as ICU and pain clinic	29 (5.28)
	No idea	199 (36.18)
Would you like to meet an anesthesiologist/surgeon before undergoing surgery?	No	15 (2.73)
	Only surgeon	104 (18.91)
	Only anesthesiologist	8 (1.45)
	Both	224 (40.73)

Indian public, despite advancements in medical practice and improvements in literacy levels.^[12] Notably, our findings highlight that only some participants knew about anesthesiologists' roles during the surgical process and their positions during the entire perioperative period. In contrast to some recently published studies, which showed that the role of anesthesiologists in intensive care unit (ICU) care was recognized by 25.3% to 53.4% of the population^[1,5]; we found that anesthesiologists' role outside the OT was distinguished by barely 5.28% of our studied population.

A systematic review revealed that anesthesiologists rarely addressed postoperative care with their patients during PAC, a practice mirrored by surgeons, who typically do not engage

in such discussions beforehand.^[13] Studies have emphasized the critical role of providing information dissemination and effective communication regarding perioperative anesthesia care to enhance patient satisfaction.^[14,15] A recent study reported that only 7.8% of patients were engaged in shared anesthesia decision-making.^[16] Additionally, low objective SDM scores were identified as a primary finding in another study.^[17] Despite recommendations from the American Society of Anaesthesiologists (ASA) emphasizing the importance of SDM and effective preoperative communication, these principles are not consistently practiced in clinical settings.^[18]

The prevailing belief among patients that the primary focus should be on the surgeon underlines the need for

Table 3: Perceptions about anesthesiologist and anesthesia services based on previous anesthesia exposure

Questions	Answers	Previous anesthesia exposure		P
		Absent (n=309) n (%)	Present (n=241) n (%)	
Who is an anesthesiologist?	No idea	164 (53.07)	80 (33.20)	<0.0001
	Specialist doctor	120 (38.83)	139 (57.68)	
	Technician/assistant	25 (8.10)	22 (9.12)	
What is the role of an anesthesiologist in operation theater?	No idea	156 (50.49)	99 (41.08)	0.0055
	Administer drugs only	79 (25.57)	54 (22.41)	
	Anesthetizes and monitors the patient	74 (23.94)	88 (36.51)	
What is your idea on the relationship between surgeon and anesthesiologist?	No idea	176 (56.96)	107 (44.40)	0.0086
	The surgeon performs his job under the anesthesiologist's order	7 (2.27)	6 (2.49)	
	The anesthesiologist performs his job under the surgeon's order	44 (14.23)	32 (13.28)	
Do anesthesiologists stay throughout the procedure?	No idea	186 (60.20)	105 (43.57)	0.0002
	No	3 (0.97)	5 (2.07)	
	Maybe	47 (15.21)	36 (14.94)	
Who is responsible for maintaining your breathing during the surgery?	No idea	203 (65.70)	125 (51.87)	0.0029
	Surgeon	49 (15.86)	40 (16.60)	
	Anesthesiologist	51 (16.50)	69 (28.63)	
Who is responsible for maintaining your pulse and blood pressure during the surgery?	No idea	188 (60.84)	122 (50.62)	0.0408
	Surgeon	69 (22.33)	56 (23.24)	
	Anesthesiologist	44 (14.24)	52 (21.58)	
Who is responsible for pain relief during the surgery?	No idea	179 (57.93)	113 (46.89)	0.0263
	Surgeon	63 (20.39)	51 (21.16)	
	Anesthesiologist	41 (13.27)	52 (21.58)	
During which period is the role of the anesthesiologist important?	No idea	166 (53.72)	99 (41.08)	0.0427
	Either before, during, or after surgery	93 (30.10)	78 (32.37)	
	During all three stages	50 (16.18)	64 (26.55)	
What are the different places where an anesthesiologist works in a hospital?	No idea	194 (62.78)	127 (52.70)	0.0573
	Only operation theater or pain clinic or ICU	101 (32.69)	99 (41.08)	
	OT plus other places such as ICU and pain clinic	14 (4.53)	15 (6.22)	
Would you like to meet anesthesiologist/surgeon before undergoing surgery?	No idea	141 (45.63)	58 (24.08)	<0.0001
	No	8 (2.59)	7 (2.90)	
	Only surgeon	41 (13.27)	63 (26.14)	
	Only anesthesiologist	3 (0.97)	5 (2.07)	
	Both	116 (37.54)	108 (44.81)	

improved patient education and communication regarding the collaborative nature of perioperative care. In addressing these challenges, our study findings reinforce the need for targeted interventions to enhance patient education and promote recognition of anesthesiology as a specialized discipline. In preoperative settings, anesthesiologists must prioritize effective communication with patients, aligning with their principles and preferences. It involves emphasizing our care goals tailored to their unique needs and highlighting nontechnical aspects while providing sufficient information and ensuring patient understanding.^[19-23] Patients who received postoperative visits from anesthesiologists

have reported higher satisfaction levels.^[24] In Indian government hospital settings, anesthesiology resident doctors should recognize this as an integral aspect of their role, notwithstanding time constraints, which may pose a significant challenge. They should receive training to address perioperative concerns with patients, overcoming any apprehensions confidently.

Numerous studies have investigated patients' knowledge and perceptions regarding anesthesia and anesthesiologists during the preoperative period, yet only a few have evaluated their impact. To assess this, we employed a 5-point Likert

Table 4: Perceptions about anesthesiologist and anesthesia services based on education levels

Questions	Responses	Illiterate (n=83) n (%)	Below graduates (n=317) n (%)	Graduates and above (n=150) n (%)	P
Who is an anesthesiologist?	No idea	53 (63.86)	151 (47.64)	40 (26.67)	< 0.0001
	Specialist doctor	28 (33.73)	140 (44.16)	91 (60.67)	
	Technician/assistant	2 (2.41)	26 (8.20)	19 (12.66)	
What is the role of anesthesiologist in operation theater?	No idea	51 (61.45)	162 (51.10)	42 (28.00)	< 0.0001
	Administer drugs only	17 (20.48)	68 (21.45)	48 (32.00)	
	Anesthetizes and monitors the patient	15 (18.07)	87 (27.45)	60 (40.00)	
What is your idea on the relationship between surgeon and anesthesiologist?	No idea	62 (74.70)	170 (53.63)	51 (34.00)	< 0.0001
	The surgeon performs his job under the anesthesiologist's order	1 (1.20)	8 (2.52)	4 (2.67)	
	The anesthesiologist performs his job under the surgeon's order	9 (10.85)	44 (13.88)	23 (15.33)	
Do anesthesiologists stay throughout the procedure?	No idea	55 (66.27)	176 (55.52)	60 (40.00)	0.0002
	Maybe	12 (14.46)	51 (16.09)	20 (13.33)	
	Yes	14 (16.87)	87 (27.44)	67 (44.67)	
Who is responsible to maintain your breathing during the surgery?	No idea	62 (74.70)	193 (60.88)	73 (48.67)	0.0015
	Surgeon	11 (13.25)	52 (16.40)	26 (17.33)	
	Anesthesiologist	8 (9.64)	68 (21.46)	44 (29.33)	
Who is responsible to maintain your pulse and blood pressure during the surgery?	No idea	54 (65.06)	188 (59.31)	68 (45.33)	0.0004
	Surgeon	18 (21.69)	74 (23.34)	33 (22.00)	
	Anesthesiologist	6 (7.23)	47 (14.83)	43 (28.67)	
Who is responsible for pain relief during the surgery?	No idea	57 (68.67)	175 (55.20)	60 (40.00)	0.0011
	Surgeon	9 (10.84)	66 (20.82)	39 (26.00)	
	Anesthesiologist	8 (9.64)	51 (16.09)	34 (22.67)	
During which period is the role of anesthesiologist important?	No idea	55 (66.27)	157 (49.53)	53 (35.33)	< 0.0001
	Either before, during, or after surgery	20 (24.10)	99 (31.23)	52 (34.67)	
	During all three stages	8 (9.63)	61 (19.24)	45 (30.00)	
What are the different places where an anesthesiologist works in a hospital?	No idea	56 (67.47)	192 (60.57)	73 (48.67)	0.0003
	Only operation theater, pain clinic, or ICU	27 (32.53)	113 (35.65)	60 (40.00)	
	OT plus other places such as ICU and pain clinic	0 (0.00)	12 (3.78)	17 (11.33)	
Would you like to meet anesthesiologist/surgeon before undergoing surgery?	No idea	29 (34.94)	122 (38.49)	48 (32.00)	0.0025
	No	4 (4.82)	8 (2.52)	3 (2.00)	
	Only surgeon	25 (30.12)	58 (18.30)	21 (14.00)	
	Only anesthesiologist	0 (0.00)	8 (2.52)	0 (0.00)	
	Both	25 (30.12)	121 (38.17)	78 (52.00)	

scale questionnaire-based survey. As a teaching department within a recently established National Institute, we aimed to enhance patients' understanding of anesthesia and the recognition of anesthesiologists through our efforts. We observed a median Likert scale of 4 for the five postoperative survey questions, indicating positive outcomes from our initiatives.

The current study has a few limitations. It was a single-center study within a newly established institute in rural India. Moreover, most of the study population

had limited educational backgrounds. Therefore, the findings of this study may not be directly applicable to urban settings or populations with higher literacy levels. While our study focused on a specific setting in rural India, the findings have broader implications for perioperative care globally, particularly in regions with similar socioeconomic contexts. Future research should explore the effectiveness of interventions to improve patient knowledge and perception regarding anesthesia, focusing on diverse patient populations and healthcare settings.

Table 5: Likert scale scores for postoperative survey

Questions to assess participants' perception in a Likert scale of 1–5	Median (q3-q1)
The experience in this institute helped me overcome my apprehensions about being anesthetized for a surgery	4 (5–3)
The anesthesiologists of this institute created a nonthreatening atmosphere and helped in shared decisions during my course of perioperative care	4 (5–4)
The survey helped me to acquire/improve knowledge on the importance of anesthesiology as a medical speciality	4 (4–3)
The survey helped me to improve my perception toward services provided by anesthesiologists in a hospital	4 (5–4)
After this survey, I would recommend mandatory discussion of anesthesia services in the hospital before undergoing any procedure with my friends/relatives	4 (5–4)

Conclusion

Our study emphasizes the need to address deficiencies in patients' knowledge and perception concerning anesthesia and anesthesiologists. It indicates a persistent gap in recognizing anesthesia as a specialized medical field and acknowledging anesthesiologists as integral perioperative caregivers. By prioritizing effective communication and SDM, anesthesiologists can significantly enhance patient comprehension and satisfaction, ultimately improving perioperative care outcomes.

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Conflicts of interest

There are no conflicts of interest.

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APPENDIX I: Preoperative Questionnaire

Section I: Demographic data

Name-	Age /Sex-
Registration No:	Date:
Education:	Occupation:
Language: Local /Hindi/English	Diagnosis:

Section II: Anaesthesia

1. Have you underwent any surgical procedure in the past ? Yes/No
2. What is the first thought that comes to your mind when hear the word- "Anaesthesia" in hospital settings ?
No idea/Making area numb/ Putting to sleep/ Making unconscious/Any other
3. Do you have any previous exposure to Anaesthesia ?
No/IV sedation ± local/ General/ Injection into the back/ Peripheral nerve block with sedation.
4. What is your source of information about Anaesthesia ?
No idea/ Media/ Relatives/ Friends/ Surgeon/ Nurse
5. Have you been explained about giving consent for anesthesia procedure ?
No/ Only for surgery/ Only for Anaesthesia/ Both for Anaesthesia and Surgery
6. What are your concerns related to being anesthetized ?
No idea/ Feeling pain/ Waking up in between/ Not waking up/ Landing up in ICU/ Not able to move/ Back ache/ Any other
7. Do you know about different types of Anaesthesia ?
No/Yes-General Anesthesia/ Injection into the back/ Local anesthesia/ Nerve blocks
8. What do you know about techniques in General Anaesthesia ?
No idea/ Inhalational/ Intravenous
9. What do you know about techniques in Regional Anaesthesia ?
No idea/ Spinal/ Epidural/ Local / Nerve block
10. What complications can occur due to Anaesthesia ?
No idea/ Overdose/ Nausea and Vomiting/ Drug reactions/ Prolonged Unconsciousness/ Ventilator support/ Backache/
Nerve or Muscle injury/ Paralysis/ Death/ Any other

Section III: Anaesthesiologist

11. Who is an Anaesthesiologist ?
No idea/ Specialist Doctor/ Technician/ Assistant
12. What is the role of an Anaesthesiologist in the Operation Theater ?
No idea/ Administers drugs only/ Anesthetizes and monitors patient.
13. What is your idea on the relationship between the Surgeon and the Anesthesiologist ?
No idea
The surgeon performs his job under the anesthesiologist's order
The anaesthesiologist performs his job under the surgeon's order
Each has different roles

14. Do anesthesiologists stay throughout the procedure ?
No idea/ No/ May be/ Yes
15. Who is responsible for maintaining your breathing during the surgery ?
No idea/ Surgeon/ Anesthesiologist/ Both
16. Who is responsible for maintaining your pulse and blood pressure during the surgery ?
No idea/ Surgeon/ Anesthesiologist/ Both
17. Who is responsible for your pain relief during the surgery ?
No idea/ Surgeon/ Anesthesiologist/ Nurse/ All of them
18. During which period is the role of anesthesiologist important ?
No idea/ Before surgery/ During surgery/ After surgery/ During all 3 stages
19. What are the different places where an anaesthesiologist works in a hospital ?
No idea/ Operation Theater/ Intensive Care Unit/ Recovery ward/ Pain clinic/ Emergency unit/ Any other
20. Would you like to meet an Anesthesiologist/ Surgeon before undergoing surgery ?
No idea/ No/ Only Surgeon/ Only Anaesthesiologist/ Both

APPENDIX II: Postoperative Questionnaire

1. The experience in this institute helped me overcome my apprehensions about being anesthetised for a surgery
Strongly agree
Agree
Neutral
Disagree
Strongly disagree
2. The anaesthesiologists of this institute created a non-threatening atmosphere and helped in shared decisions during my course of perioperative care
Strongly agree
Agree
Neutral
Disagree
Strongly disagree
3. The survey helped me to acquire/improve knowledge on the importance of Anaesthesiology as a medical speciality
Strongly agree
Agree
Neutral
Disagree
Strongly disagree
4. The survey helped me to improve my perception towards services provided by anaesthesiologists in a hospital
Strongly agree
Agree
Neutral
Disagree
Strongly disagree

5. After this survey, I would recommend mandatory discussion of anaesthesia services in the hospital before undergoing any procedure with my friends/relatives
 - Strongly agree
 - Agree
 - Neutral
 - Disagree
 - Strongly disagree