

## ORIGINAL ARTICLE

# KNOWLEDGE ABOUT ANESTHESIA AND PERCEPTION ABOUT ANESTHESIOLOGISTS AMONG PATIENTS AT A RURAL TERTIARY CARE HOSPITAL: A CROSS SECTIONAL SURVEY

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## ABSTRACT

**Background:** Our patients are not well aware of the role of anesthetist and especially their knowledge is very poor regarding anesthetist commitments within and outside the operation theatre. The present study was conducted to know the awareness and knowledge of the patients about anesthesia and anesthetist.

**Methodology:** The present study was a cross sectional study conducted using predesigned questionnaire containing questions related to the awareness and knowledge of anesthesia among the patients coming for a pre-anesthesia check-up after taking their voluntary informed consent.

**Results:** Only 22% of the cases know correctly that anesthetist is the person who will resuscitate the patients if any mishap occurs in operation theatre. It was observed that 63% of the cases feel that the role of the anesthetist in operation theatre is to put the patient to sleep. The knowledge about the types of anesthesia was present among 170 (56.7%) of the participants. 52% believe that the role of anesthetist is equivalent to that of the surgeon. Significant association was observed between educational status and perception about the anesthetist as a doctor ( $p < 0.05$ ), equivalent role of anesthetist and surgeon ( $p < 0.05$ ) and the knowledge about anesthetist as a person who gives anesthesia ( $p < 0.05$ ).

**Conclusion:** The available data suggest that specialty of anesthesia has not done all that it can to educate the patients in particular and the public at large about the role of anesthesiologist.

**Keywords:** Anesthesia, Anesthetist, knowledge, perceptions

## INTRODUCTION

The specialty of anesthesia has revolutionized over the past 50 years by the development of new anesthetic agents, techniques and new development in monitoring system. However, even now our patients are not well aware of the role of anesthetist and especially their knowledge is very poor regarding anesthetist's commitments outside the operation theatre.<sup>1</sup> There is a general feeling that the specialty of anesthesia carries low profile when compared to other medical and surgical specialties.<sup>2</sup> In some countries studies of similar kind showed that the public knowledge of anesthetic practice and attitude towards it, is limited.<sup>3</sup>

During last thirty years, role of anesthesiologist has extended not only inside but also outside traditional operating room settings. Public awareness programmes are being arranged in many developed countries and on 25 May 2000 National Anesthesia Day was observed to inform the public about the role and training of anesthetists.

Anesthesiologist plays a very critical role in intensive critical care units, trauma centres, pain clinics and as a member of resuscitation team all over the world.<sup>4</sup> Since last ten years there is tremendous health care awareness, especially in developed countries. In India also, people have begun to have awareness since CPA (consumer protection act) has come into existence. But still they have hardly any knowledge of the structure of medical services and practices especially related to operating room and anesthetic management.

## MATERIALS AND METHODS

This study was conducted at a rural tertiary teaching hospital after obtaining approval from the hospital ethics committee. We had randomly selected 300 adult patients aged 18 to 75 years admitted for elective surgery under different specialties coming to anesthesia OPD for pre-anesthesia check-up after their voluntary informed consent. The study was conducted over a period of 3 months. Patients with age more than 75 years and less than 18 years, psychiatric illness, severe

medical or surgical conditions, inability to speak and refusal to participate were excluded from the study.

The study was based on responses to 15 questions, structured to assess the patients' knowledge, perceptions and fears related to anesthesia and anesthesiologist. The questionnaire was administered in local language so that the best understanding of the participants can be achieved. Interviews were carried out by a team of consultant anesthesiologist and resident doctors posted in anesthesia OPD. The data was expressed as percentage proportions.

**RESULTS**

There were total 300 participants enrolled in the study. The table 1 provides the information about the demographic profile of the cases.

**Table 1: Demographic profile of the participants**

Variables	Frequency (%)
<b>Age group</b>	
>30	68 (22.7)
30-44	112 (37.3)
45-59	67 (22.3)
60-74	48 (16.0)
<75	5 (1.7)
<b>Gender</b>	
Male	160 (53.3)
Female	140 (46.7)
<b>Education</b>	
Illiterate	57 (19.0)
Upto SSC	112 (37.3)
Upto HSC	58 (19.3)
Graduate	69 (23.0)
Post Graduate	4 (1.3)
<b>Residence</b>	
Urban	74 (24.7)
Rural	226 (75.3)

**Table 2: Knowledge of the participants about anesthetist**

Variables	Frequency (%)
<b>Knowledge regarding anesthetist as a doctor</b>	
Hear say	122 (40.7)
Told by other doctor	76 (25.3)
Read somewhere	44 (14.7)
Previous experience	58 (19.3)
<b>Role of anesthetist in OT</b>	
Put patient to sleep	189 (63.0)
Keep patient alive	41 (13.7)
Treat medical problems	12 (4.0)
Help the surgeon	10 (3.3)
Monitor heart, BP, breathing	6 (2.0)
Wakes up comfortably	5 (1.7)
All of them	37 (12.3)
<b>Person resuscitating if any mishap occurs in OT</b>	
Anesthetist	66 (22.0)
Surgeon	99 (33.0)
Physician	13 (4.3)
Nurse	19 (6.3)
Don't know	103 (34.3)

Only 22% of the cases know correctly that anesthetist is the person who will resuscitate the patient if any mishap occurs in operation theatre. It was observed that 63% of the cases feel that role of the anesthetist in operation theatre is to put the patient to sleep.

**Table 3: Knowledge of types of anesthesia**

Variables	Frequency (%)
<b>Knowledge on types of Anesthesia (multiple responses)</b>	
General	97 (32.3)
Local	38 (12.7)
Regional	78 (26.0)
All	52 (17.3)
<b>Route of administration of general anesthesia</b>	
Inhalation	116 (38.7)
Intravenous	36 (12.0)
Both	30 (10.0)
No idea	118 (39.3)
<b>Route of administration of regional anesthesia</b>	
Administration by needle in back	77 (25.7)
Administer locally	16 (5.3)
Both	22 (7.3)
No idea	185 (61.7)

Knowledge about the types of anesthesia was present among 170 (56.7%) of the participants, that is they knew at least one among the various types of anesthesia.

**Table 4: Fears of anesthesia (multiple responses)**

Fears of anesthesia	Frequency (%)
Needle prick	42 (14.0)
Pain during surgery	86 (28.7)
Not coming out of anesthesia	43 (14.3)
Awareness during surgery	56 (18.7)
Backache	43 (14.3)
Pain after surgery	18 (6.0)
Death	6 (2.0)
No fear	69 (23.0)

The most common fear among the participants about anesthesia is the fear of pain during surgery. Other fears were needle prick, awareness during surgery, not coming out of anesthesia, backache, pain after surgery and death.

**Table 5: Knowledge of participants about the roles of anesthetist**

	Frequency (%)
<b>Role of anesthetist after operation</b>	
Monitor the condition of patient	142 (47.3)
Pain relief	19 (6.3)
Complication management	9 (3.0)
No role	130 (43.4)
<b>Place where anesthetist are involved</b>	
Operation theatre	203 (67.7)
ICU	49 (16.3)
Cancer Pain	14 (4.7)
Labour analgesia	2 (0.7)
Transfer of patients	10 (2.3)
No idea	22 (8.3)
<b>Role of anesthetist equivalent to that of surgeon</b>	
Yes	156 (52.0)
No	144 (48.0)

**Table 6: Association between educational status and knowledge about anesthetist**

Variables		Educational status			Total	P value
		Illiterate	SSC (upto 10th)	Higher Education (11 and above)		
Whether Anesthetist is a Doctor	Yes	34	88	111	233	<0.05
	No	23	24	20		
Knowledge about anesthetist as a person who gives anesthesia	Yes	43	96	122	261	<0.05
	No	14	16	9		
Equal role of anesthetist and surgeon	Yes	23	50	83	144	<0.05
	No	34	62	48		

Only 52% believe that the role of anesthetist is equivalent to that of surgeon. It is surprising that 43.4% of the cases do not know the role of anesthetist after operation.

No association was observed between gender and perception whether anesthetist is a doctor ( $p>0.05$ ) and equal role of anesthetist and surgeon ( $p>0.05$ ) while significant association was observed between male gender and the knowledge about anesthetist as a person who gives anesthesia ( $p<0.05$ ).

No association was observed between age group of the participants and perception whether anesthetist is doctor ( $p>0.05$ ), equal role of anesthetist and surgeon ( $p>0.05$ ) and the knowledge about anesthetist as a person who gives anesthesia ( $p>0.05$ ).

Significant association was observed between educational status and perception whether anesthetist is doctor ( $p<0.05$ ), equal role of anesthetist and surgeon ( $p<0.05$ ) and the knowledge about anesthetist is a person who gives anesthesia ( $p<0.05$ ). (Table 6)

## DISCUSSION

Anesthesia is a major supportive specialty which allows major advanced surgeries to be performed, and the general public does not have the usual perception as they have of other medical and surgical specialties. Better awareness of anesthesia activities and proper expectation by the patients would help health administrators in recruiting more anesthesia related health facilities to consumers.<sup>5</sup>

Recognition of the anesthesia profession as an independent specialty would encourage future recruits to take up the specialty. Lack of recognition and decreased appreciation of the role of the anesthesiologist by the patient contributes to the frustration of the anesthetic practitioner.<sup>6</sup> This study showed that there is harmony with studies of other developing countries that the patient is not well informed about the specialty and therefore necessitating more information.<sup>2</sup> In our study, only 22% of the cases know correctly that anesthetist is the person who will resuscitate the patients if any mishap occurs in operation theatre.

The most common fear among the participants about the anesthesia is the fear of pain during surgery. Other

fears were needle prick, awareness during surgery, not coming out of anesthesia, backache, pain after surgery and death. Similar results were obtained in the study done by Ketan Shevde.<sup>7</sup> An earlier survey carried out in Singapore reported that patient's fear of surgery was that he might not come out of anesthesia but most of the patients were more afraid of post-operative pain.<sup>8</sup> A survey done by Ahsan- Ul-Haq showed that 40% patients were afraid of surgery and 60% were afraid of anesthesia.<sup>9</sup>

## CONCLUSION

The available data suggest that speciality of anesthesia has not done all that it can to educate the patients in particular and the public at large about the role of anesthesiologist. The educational efforts made during preoperative and post operative visits may be supplemented through broader avenues such as news items in newspapers, magazines, radio, and television.

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