



**ORIGINAL RESEARCH PAPER**

**Anaesthesia**

**KNOWLEDGE ABOUT ANAESTHESIA IN PATIENTS UNDERGOING SURGERY: A SURVEY**

**KEY WORDS:** anaesthesia, anaesthesiologist, general population, awareness

**Dr. Sampathila Padmanabha**

HOD & Prof., Dept. of anaesthesia Yenepoya medical college hospital Mangalore

**Dr. Mumtaz Ahmed\***

Post graduate student Dept. of anaesthesia Yenepoya medical college hospital Mangalore \*Corresponding Author

**ABSTRACT**

The anaesthesiologist plays a pivotal role in perioperative period for care of the patient. This role is neither recognised nor appreciated either by the patients or general population. The contribution of the anaesthesiologist in health care set up is rarely discussed in public platforms. A cross sectional observational study was conducted on 150 patients for a period of 3 months. Though sixty percent of our patients had undergone surgeries under anaesthesia in the past, they could hardly recollect the anaesthesia procedure. The overall knowledge of anaesthesia in our study population was poor. In most of our patients (25%) the source of knowledge about anaesthesia is the treating surgeon. Only three patients knew about anaesthesia through electronic and social media. The media has tremendous potential to educate the general population about the role of anaesthesiologist in health care sector. Introduction of the team and regular post operative visits will definitely go a long way.

**INTRODUCTION**

Despite the tremendous advances in the field of anaesthesia, the basic knowledge related to anaesthesiology among general population is poor. The lack of knowledge is most prevalent in rural section of the population. The scope of anaesthesia is beyond the traditional operating theatres and includes recovery rooms, intensive care units and pain management.

The anaesthesiologist plays a pivotal role in perioperative period for care of the patient. This role is neither recognised nor appreciated either by the patients or general population. The contribution of the anaesthesiologist in health care set up is rarely discussed in public platforms.

As the health care system is changing drastically over the decade, the need to know the role of anaesthesiologist is essential. The need to educate the general population about the importance of anaesthesiologist in their well being is manifold.<sup>(1)</sup>

**MATERIALS AND METHODS:**

A cross sectional observational study was conducted on 150 patients for a period of 3 months. After approval from the ethical committee and written informed consent, patients with no or very little medical knowledge were enrolled in the study. The patients belonging to both sexes in the age group of 18-75 years who were scheduled for elective surgeries in a tertiary care hospital.

Patients posted for emergency procedures, psychiatric illnesses, inability to hear and speak and those who refused to participate in the study were excluded from the study.

The participants were explained that their participation in the study was totally voluntary and their responses will be kept confidential. The participants were given a questionnaire one day before scheduled surgery in their language and English. The questionnaire had three parts. The first part of the questionnaire was about demographic information. The second part of the questionnaire was designed to assess the knowledge regarding the anaesthesia and its techniques. The third part of the questionnaire was based on assessment regarding anaesthesiologist.<sup>(2)</sup>

Results: A cross sectional observational study was conducted on 150 patients to assess the knowledge of anaesthesia and anaesthesiologist in general population. 99 male patients and 51 female patients were enrolled.

Majority (37%) of our patients were high school drop outs. Less than seven percent of our patients are graduates. Twenty percent of our patients are illiterate.

All our patients were from non medical background. Majority

(22%) of our patients were labourers. Seventy percent of female patients were homemakers. Fourteen percent of total patients were unemployed. Eleven percent of the patients were students.

About 60% of our patient had past history of undergoing surgeries. When patients were asked to opine about their knowledge of anaesthesia, patients who had not undergone any previous procedures did not know about anaesthesia. Of the patients who had surgeries in the past, twenty seven percent of the patients thought anaesthesia is all about putting the patient to sleep. Twenty five percent of the patients said anaesthesia is making patient unconscious.

The information about anaesthesia in majority of our patients was given by the surgeon. Social media was source of information in only three patients.

When patients were enquired about their fear regarding operative procedure, maximum number had fear of pain (53%). Three fourth of our patients had no knowledge about complications of anaesthesia. 41 % of our patients had no fear about anaesthesia. About 10 % of our patients did fear death and need for ventilator support. More than 70 % of our patients did not know about different types of anaesthesia and anaesthesia techniques.

Half of our patients knew that anaesthesiologist is a doctor. Thirty percent of the patients did not have any idea about anaesthesiologist. Only seventeen percent of them knew that anaesthesiologist is a specialist.

Fifty percent of the patients were unaware of the role of anaesthesiologist in operation theatre. Twenty five percent of these patients think anaesthesiologist administers drugs and monitors patients' intra operatively. Only thirty percent of the patients feel anaesthesiologist remains in the operation theatre throughout the procedure.

Six percent of our patients feel anaesthesia is administered by inhalation of anaesthetics through kerchief. Half of them know that anaesthesia is given through injections either at the site of surgery or through intravenous access. Forty four percent have no idea about mode of anaesthesia administration.

About half of the patients are unaware whether anaesthesiologist is present during their surgery. Among the remaining half, thirty six percent of the patients opined single anaesthesiologist is present in the operation theatre.

Thirty six percent of the patients felt surgeon is responsible for post operative pain relief and thirty three percent felt anaesthesiologist is responsible.

Fifty six percent of the patient desire that consent be taken for both surgical procedure and anaesthesia. Nineteen percent patients consented only for surgical procedure. Only twenty three percent liked to meet both surgeon and anaesthesiologist prior to surgery. In around sixty percent of the patients were directed by the surgeon to meet the anaesthesiologist.

About one third of the patients knew that anaesthesiologist is responsible for their recovery and anaesthesiologist also work in intensive care unit, recovery room and pain clinic.

Variables	Numbers	Percentage
Gender	99	66
Male	51	34
Female		
Education	31	20.7
Not educated	33	22
Primary school	56	37.3
High school	20	13.3
Intermediate	6	4
Graduation	4	2.7
Post graduation		
Occupation	21	14
Unemployed	17	11.3
Students	36	24
Housewives	17	11.3
Drivers	17	11.3
Farmers	33	22
Labourers	9	6
Others		

Table 1. patient demographics

Questions	Response	No. Of patients	Percentage
Previous h/o surgery	Yes	89	59.3
	No	61	40.7
Idea about anaesthesia	Making area numb	13	8.7
		38	25.4
	Making unconscious	58	38.7
		41	27.3
Exposure to type of anaesthesia	No idea		
	Putting to sleep		
	General	18	12.0
	Local	9	6
Source of anaesthesia	No	79	52.7
	Yes- cant recollect	44	29.3
	Anaesthesiologist	10	6.7
	Friend	9	6.0
Fears about operative procedure	Media	3	2.0
	No idea	56	37.3
	Nurse	11	7.3
	Relative	10	6.7
	Self exposure	13	8.7
	Surgeon	38	25.3
	Being anaesthetised	4	2.7
Fears related to anaesthesia	Being awake	8	5.3
	Dont know	44	29.3
	Feeling pain	80	53.3
	Surgical procedure	14	9.3
Fears related to anaesthesia	Surgeon	38	25.3
	Dont know	62	41.3
	Feeling pain	55	36.7
	Not able to move	7	4.7
	Not waking up	4	2.7
Fears related to anaesthesia	Unconscious	22	14.7

Knowledge about complications of anaesthesia	Death	7	4.7
	No idea	113	75.3
	Not waking up	14	9.3
	Overdose Ventilator	10	6.7
Complications of regional anaesthesia	6	4.0	
	Back ache	26	17.3
	Muscle we	6	4.0
	Nerve injury	3	2.0
Consent for anaesthesia	No idea	115	76.7
	Only for surgery	29	19.3
	no	37	24.7
Knowledge about different types of anaesthesia	yes	84	56.0
	GA	4	2.7
	local	1	.7
Techniques of regional anaesthesia	no	108	72.0
	yes	35	23.3
	Local	7	4.7
No idea	No idea	127	84.7
	Spinal	13	8.7
	yes	3	2.0

Table 2. Knowledge about anaesthesia

Qualification of an anaesthesiologist	Response	No. Of patients	percentage
Role of anaesthesiologist in OT	Doctor	74	49.3
	No idea	46	30.7
	Specialist	26	17.3
	Technician	4	2.7
Presence of anaesthesiologist in OT	Administers drugs only	37	24.7
	Anaesthesises, monitors	37	24.7
	No idea	76	50.7
Anaesthesia procedure	may be	40	26.7
	no	1	.7
	no idea	64	42.7
	yes	45	30.0
No. Of anaesthesiologist in OT	Gas admn. with kerchief	9	6.0
	Injection	44	29.4
	Injection at the site	29	19.3
	no idea	66	44.0
Person responsible for pain relief	no idea	73	48.7
	one	55	36.7
	three	6	4.0
	two	16	10.7
Interaction before surgery	All of them	16	10.7
	Anaesthetist	34	22.7
	no idea	34	22.7
	Nurse	12	8.0
	Surgeon	54	36.0
Need to need anaesthesiologist before surgery	Anaesthesiologist only	35	23.3
	no	21	14.0
	Surgeon only	23	15.3
Who directed to meet anaesthesiologist?	Anaesthesiologist & surgeon	71	47.3
	no	15	10.0
	no idea	32	21.4
Role of anaesthesiologist in recovery of patient	yes	103	68.7
	nurse	34	22.7
	self	28	18.7
Places of work of anaesthesiologist	surgeon	88	58.7
	no	8	5.3
	no idea	90	60.0
ICU	yes	52	34.7
	no idea	11	7.3
	OT only	98	65.3
	Pain clinic	32	21.3
	Recovery	2	1.3
Recovery	Recovery	7	4.7

Table 3. Knowledge about anaesthesiologist

**DISCUSSION:**

The study was undertaken to compare the knowledge of patients about anaesthesia and anaesthesiologist. Unlike the patients in developed countries<sup>(3)</sup>, our patients have poor understanding about anaesthesiology<sup>(1)</sup>.

Though sixty percent of our patients had undergone surgeries under both regional and general anaesthesia in the past, they could hardly recollect the anaesthesia procedure they had been through<sup>(4)</sup>. This may be due to less amount of time spent in the operation theatre, amnesia and lack of discussion between the anaesthesiologist and the patient<sup>(5)</sup>.

In most of our patients (25%) the source of knowledge about anaesthesia is the treating surgeon. Only three patients knew about anaesthesia through electronic and social media. The media has tremendous potential to educate the general population about the role of anaesthesiologist in health care sector<sup>(6)</sup>. Introduction of the team and regular post operative visits will definitely go a long way.

In a previous study 50-60% of the patients was afraid of intra operative and post operative pain. Fear of death was seen in 24%<sup>(7)</sup>. In our study fear of post operative pain was similar but fear of death was less in our patients (<5%).

Half of our patients knew anaesthesiologist is a doctor and 17% of our patients knew anaesthesiologist is a specialist. In a study about 90% of the patients thought giving anaesthesia is a skilful job. In previous studies patients thought anaesthesiologist is an assistant to surgeon<sup>(8)</sup>.

In a study, 60% of rural and 75% of urban population felt that anaesthesiologist monitor vital signs throughout the procedure<sup>(7)</sup>. Where as in our study about half of our patients had no idea about the work done by anaesthesiologist in the operation theatre. In the same study, it was observed that 70% of urban and 43% of rural population knew that anaesthesiologist work outside the operation theatre as well. Sixty five percent of our patients had no idea about anaesthesiologist role outside the operation theatre. In another study 22% of the patients knew resuscitation was done by anaesthesiologist in adverse times<sup>(9)</sup>.

In our study, 56% of the patients knew they have consented both for surgery and anaesthesia and 69% of them desired to meet the anaesthesiologist before surgery which was comparable to other studies<sup>(10,11)</sup>.

**Conclusions:** The overall knowledge about anaesthesia in our study population was poor, even in patients who had undergone surgeries in the past compared to western countries<sup>(12)</sup>. There is scope of improvement through various social and electronic media.

**REFERENCES**

1. Udita, N. (2007). Public Awareness about Anaesthesia and Anaesthesiologist: A Survey, *Indian Journal of Anaesthesia*; 51 (5): 420-426
2. Marulasiddappa, V. (2017). A survey on awareness about the role of anaesthesia and anaesthesiologist among the patients undergoing surgeries in a tertiary care teaching women and children hospital, *Anaesthesia , Essays and research*, 11(1):144-150
3. Prasad CS, Suresh G. (2014) A survey on public awareness about the role of anaesthesiologists. *Ain-Shams J Anaesthesiol.* ; 7:456-9.
4. Eyclade, O. (2014). Patient's perception and knowledge of anaesthesia and anaesthetists- a questionnaire survey,
5. Deepa, J. (2002). A study of patients' perception about Knowledge of anaesthesia & anaesthesiologist, *Indian J. Anaesth*; 46 (1): 26-30
6. Pandya K. (2016). Awareness Regarding Anaesthesiology and Anaesthesiologists among General Population in Developing Country- A Cross Sectional Survey. *Ntl J Community Med*; 7(6):515-518.
7. Veeramachaneni R, Indurkar PS. (2016). Awareness about anaesthesia in India: a survey in southern India. *Int J Res Med Sci*; 4:499-508.
8. Singh T, Sharma S, Banerjee B, Garg S. (2018). Knowledge regarding anaesthesiology and anaesthesiology among patients and attendants attending a rural hospital of New Delhi. *J Edu Health Promot*; 7:12.
9. Khara BN, Rupera KB, Gondalia KR, Kamat HV (2013). Knowledge about anaesthesia and perception about anaesthesiologists among patients at a rural tertiary care hospital: A cross sectional survey. *Natl J Med Res*; 3:371-3
10. Mathur SK, Dube SK, Jain S. (2009). Knowledge about anaesthesia and anaesthesiologist amongst general population in India. *Indian J Anaesth.* ; 53:179-86.
11. Gurunathan U, Jacob R. (2004) The public's perception of anaesthesiologists - Indian attitudes. *Indian J Anaesth*; 48:456-60.

12. Swinhoe CF, Groves ER. (1994). Patient's knowledge of anesthetic practice and the role of anesthetist. *Anesthesia*; 49:165-166