



## PATIENTS PERCEPTION ABOUT ANAESTHESIA AND ANAESTHETISTS- A QUESTIONNAIRE STUDY

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### ABSTRACT

**BACKGROUND:** Although anesthesiology has grown tremendously and anesthesiologists play a crucial role in the perioperative management of patients and also outside operating theater (OT) such as critical care, pain clinic, and labor analgesia, they do not get due recognition.

**MATERIALS AND METHODS:** This study was conducted on patients undergoing surgery at our hospital, sdumc, tamaka, kolar during the period from May 2021 to september 2021. Patients scheduled to undergo elective surgery in the age group of 18–65 years with the American Society of Anesthesiologists (ASA) Grades 1 and 2, who are willing to participate and given written informed consent were included.

**RESULT:** 33% percent of the participants were illiterate and of the educated, 39% percent were graduates or postgraduates. Patients with higher level of education had better knowledge of anesthesiology and role of an anesthesiologist than those with lesser education. 54% percent did not know the complications, types of anesthesia and 14% did not know that anesthesiologist is a doctor.

**CONCLUSION:** Most of the participants were not aware of the role of anesthesia and anesthesiologists inside and outside OT which could be attributed to their lower level of education, the fraternity of anesthesiologists has to educate patients and surgeons about the role of anesthesia.

**KEYWORDS :** Anesthesia, anesthesiologist, awareness

### INTRODUCTION:

Anesthesiology as a specialty has evolved tremendously over the last few decades and anesthesiologists play a very crucial role in perioperative care, intensive care, labor analgesia, and pain clinic. The role of anesthesiology and anesthesiologists has traditionally been viewed as behind the screen specialty, and it is only in the last few decades, this specialty has grown beyond the four walls of the operation theater and the role of anesthesiologists is being increasingly appreciated in pain clinic, labor analgesia, accident and emergency, and in Intensive Care Unit (ICU). Anesthesiology is the art and science of relieving pain during surgery and safety is the most important priority achieved through eternal vigilance[1]. The anesthesiologists play a very important role during and after surgery by protecting the patients from any adverse events during surgery through better management of vital functions, by providing good pain relief, and providing optimum surgical conditions to the surgeon and keep the patients safe by close monitoring[1,2]. However, despite clearly playing a very crucial role in the perioperative management of patients and also in other areas such as pain clinic, labor analgesia, and critical care, it is still felt that anesthesiologist does not get the due he deserves, both in the eyes of the public and also fellow medical professionals [1,2,3]. The present study was conducted specifically to assess the level of awareness about the role of anesthesia and anesthesiologists among patients scheduled to undergo elective surgeries in a Tertiary Care Hospital.

### OBJECTIVES:

The present study was done to assess the patients awareness and knowledge about anaesthesia and anaesthesiologists.

### METHODOLOGY:

**Study design and setting:** This was a observational study conducted among patients admitted for surgery in Sri Devaraj Urs Medical College, Kolar

Society of Anesthesiologists (ASA) Grades 1 and 2, undergoing elective surgeries and who are willing to participate and given written informed consent for this survey.

### Exclusion Criteria:

Patients not willing to take part in the study, age more than 65 years, ASA Grade 3 and above, and patients posted for emergency surgery were excluded from the study.

**Study duration:** 3 months (July 2021-September 2021)

**Sample size:** Sample size was calculated according to the formula

$$n = Z^2 Pq / d^2$$

Assuming 48% of the participants have knowledge about anaesthesia and absolute precision of 10%, sample size has been calculated as 95.

**Sampling technique:** Computerized Randomised Sampling

### Ethical consideration:

After obtaining ethical committee approval from Institutional Human Ethics Committee, the study was conducted. The informed consent was obtained before the initiating the study. The confidentiality of the participants was maintained throughout the phase of the study.

### Statistical Methods:

Descriptive and inferential statistical analysis has been carried out in the present study. Results on continuous measurements are presented on Mean SD (Min-Max) and results on categorical measurements are presented in Number (%). Significance is assessed at 5 % level of significance. The following assumptions on data is made, Assumptions: 1. Dependent variables should be normally distributed, 2. Samples drawn from the population should be random, Cases of the samples should be independent.

### Inclusion Criteria:

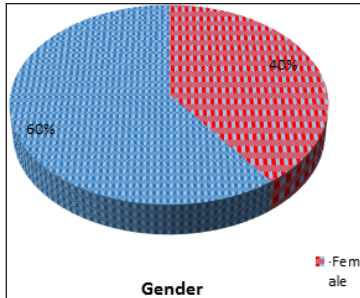
Adults in the age group of 18–65 years with the American

Chi-square/ Fisher Exact test has been used to find the

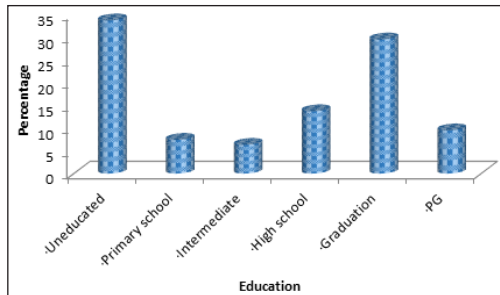
significance of study parameters on categorical scale between two or more groups, Non-parametric setting for Qualitative data analysis. Fisher Exact test used when cell samples are very small.

**Statistical software:** The Statistical software namely SPSS 22.0, and R environment ver.3.2.2 were used for the analysis of the data and Microsoft word and Excel have been used to generate graphs, tables etc.

## RESULTS:

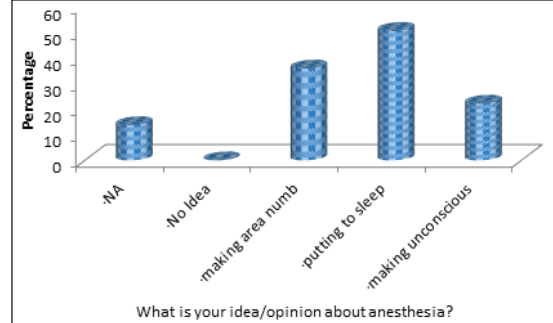
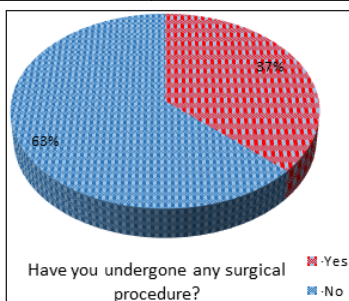


In our study, 60% of the participants were Males and 40% of participants were females.



67% of the participants were educated and 33% were illiterate. Of the educated, 7% had completed primary school, 13.7% high school, and 6% intermediate, 29.5% graduate, 9.5% postgraduate.

Variables	No. of patients (n=95)	%
<b>Age in years</b>		
< 20	2	2.1
20-30	27	28.4
31-40	20	21.1
41-50	12	12.6
51-60	26	27.4
> 60	8	8.4
<b>Gender</b>		
Female	38	40.0
Male	57	60.0
<b>Education</b>		
Uneducated	32	33.7
Primary school	7	7.4
Intermediate	6	6.3
High school	13	13.7
Graduation	28	29.5
PG	9	9.5



37% had prior exposure to surgery and 63% had no previous surgery. Regarding their knowledge of anesthesiology, 13% had no idea about anesthesiology despite 37% having had prior exposure to surgery. 35% percent felt it involved making area numb, 50% thought anesthesia was putting patients to sleep, and 22% thought it was to make patient unconscious.

Specifically with regards to prior exposure to anesthesia, 23% said that they did have prior exposure to anesthesia and remaining 77% had no prior exposure to anesthesia. Of those 23% who said they had previous exposure to anesthesia, 13% received general anaesthesia and no one received local anaesthesia. As far as their source of information about anesthesia, 13% had self-exposure, 12% from a friend, 17% from a relative, 23% from Anaesthetist and 33% had no idea.

When asked about their fears/concerns about anesthesia, 23% feared feeling pain during surgery, 30% feared being unconscious, 46% feared not waking up.

When asked about different types of anesthesia, 45% had no idea and 55% knew about types of anesthesia, with 22% stating they knew about spinal anesthesia

Regarding their knowledge about who is an anesthesiologist, 60% said that anesthesiologist is a doctor, 14% had no idea, 26% answered specialist.

When participants were asked specifically about the role of an anesthesiologist in OT, 20% had no idea, 35% answered he administers drugs, and 45% answered anesthetist anesthetizes patients and also monitors them. When asked whether they were actually aware that anesthetist was present in the OT, 67% had no idea, 9% said definitely yes, and 24% answered may be present. Regarding their knowledge about methods employed by the anesthesiologist to anesthetize patients, 86% answered by means of an injection.

The participants were then asked about who was looking after pain relief during and after surgery. 6% answered it was a surgeon, 34% had no idea, 21% answered it was a nurse, only 6% answered anesthetist, and remaining 39% answered all the above

Regarding willingness to meet anesthesiologist before surgery, 67% were willing. When asked whether anesthetist was responsible for recovery after surgery, 41% had no idea, 59% answered yes. Regarding workplace of the anesthesiologist, 55% had no idea, 45% answered only OT, and remaining 9% answered ICU.

SECTION-2	No. of patients (n=95)	%
Have you undergone any surgical procedure?		
• Yes	35	36.8
• No	60	63.2
What is your idea/opinion about anesthesia?		

• NA	13	13.7
• No Idea	0	0.0
• making area numb	34	35.8
• putting to sleep	48	50.5
• making unconscious	21	22.1
Do you have any previous exposure to anesthesia?		
• Yes	22	23.2
• No	60	63.2
• Only Local	0	0.0
• General	13	13.7
What is your source of information about anesthesia?		
• No idea	32	33.7
• Media	0	0.0
• Relative	16	16.8
• Friend	12	12.6
• Self-exposure	13	13.7
• Surgeon	0	0.0
• Nurse	0	0.0
• Anaesthetist	22	23.2
What are your fears related to anesthesia?		
• Don't know	0	0.0
• feeling pain	22	23.2
• becoming unconscious	29	30.5
• not waking up	44	46.3
• not able to move	0	0.0
Do you know about complications due to anesthesia?		
• No idea	52	54.7
• Overdose	76	80.0
• Not waking up	43	45.3
Have you been explained about giving consent for anesthesia procedure?		
• Yes	95	100.0
• No	0	0.0
Do you know about different types of anesthesia?		
• Yes	52	54.7
• No	43	45.3
What do you know about techniques in regional anesthesia?		
• No idea	74	77.9
• Spinal	21	22.1
• Epidural	0	0.0
• Local blocks	0	0.0

SECTION-3	No. of patients (n=95)	%
Who is an anesthesiologist?		
• No idea	13	13.7
• Doctor	57	60.0
• Specialist	25	26.3
• Technician	0	0.0
• Assistant	0	0.0
What is the role of anesthetist in operation theater?		
• No idea	19	20.0
• Administers drugs only	33	34.7
• Anaesthetizes and monitors patient	43	45.3
How do you think patients will be anaesthetized?		
• No idea	0	0.0
• Only injection at the site	50	52.6
• Injection	82	86.3
• Gases administered with kerchief	0	0.0
Who is responsible for pain relief during and after surgery?		

• No idea	32	33.7
• Nurse	20	21.1
• Anaesthetist	6	6.3
• Surgeon	6	6.3
• All	37	38.9
Would you like to meet anesthesiologist/surgeon before undergoing surgery?		
• Yes	64	67.4
• No	0	0.0
• Only treating surgeon	13	13.7
• Both	18	18.9
Are the anesthesiologists responsible for the recovery of the patient?		
• No idea	39	41.1
• Yes	56	58.9
• No	0	0.0
What other places does the anesthesiologists work in the hospital setup?		
• No idea	52	54.7
• Operation theatre only	43	45.3
• Intensive care unit	9	9.5
• Recovery	0	0.0
• Pain clinic	0	0.0

## DISCUSSION:

Our study was conducted to assess the knowledge about anesthesia among the patients scheduled for surgery in a Tertiary Care Teaching Hospital, to study the awareness about the role of anesthesiologists in the perioperative management of patients scheduled to undergo operations and to analyze the perspective of patients about anesthesia as a specialty. In our study, 37% of patients had previous exposure to surgery, overall their awareness about anesthesia and different techniques of anesthesia were poor. This could well be due to their lack of education as 33% of the participants were illiterate.

However, this is in sharp contrast to a very high level of awareness (80%) about anesthesia and the role of anesthetist among the UK population as reported in a study by Swinhoe and Groves[7]. This probably reflects the higher literacy rate in Western countries such as the UK and also a better interaction between anesthetist and patients during preanesthetic evaluation (PAE) as reported by Naithani et al[3].

In our study, 60% of the patients were aware that anesthesiologist was a doctor and 26% knew that anesthesiologist is a specialist. This is in agreement with previous studies when most of the patients are not even aware that anesthesiologist is a doctor, and most of the people are not aware that anesthesiologists are specialists like surgeons or physicians as reported by Uma and Hanji, Mathur et al., Naithani et al., and Irwin et al[1,2,3,8].

It was extremely disappointing to note that only 9.5% of the patients were aware about the role played by anesthetist outside the OT. This lack of knowledge has been found in earlier studies by Gurunathan and Jacob and Herman[5,9], and there has been no improvement over the years as reported in previous surveys by Uma and Hanji[1,2,3]. Although fear of feeling pain during surgery was the biggest concern/fear among 84% of the patients, yet only 6.3% knew it was the anesthetist who will provide pain relief during and after surgery, re-emphasizing their ignorance about the role of anesthesia and anesthesiologist[9,10].

This study shows that although anesthesiologists play a very important role both in and outside the OT, not many patients are aware about anesthesiology as a specialty and the role of

anesthesiologists. Although this may be partially attributed to the low level of education of our patients, much needs to be done by the fraternity of anesthesiologists in educating the patients.

Overall, it is disappointing that most of the patients in this study had poor knowledge about anesthesia, types and techniques of anesthesia, and role of anesthesiologist inside and outside OT. Anesthesiologists need to spend more time in PAE clinics in explaining to patients the role of anesthesia, types of anesthesia, techniques, benefits and potential complications/side effects with each technique, labor analgesia, informed anesthesia consent, and clearly highlighting their role to the patients both inside and outside OT[1,2,3]. The familiar face of anesthetist goes a long way in relieving the anxiety of the patient in an unfamiliar environment of the OT[12].

Anesthesiologists need to highlight their role in media, conduct health melas to educate patients about anesthesia and role of anesthesiologists, and also educate the surgeons who in turn can help improve the knowledge of this specialty among patients.

### CONCLUSION:

In conclusion, this study identified deficiencies in patients knowledge of anaesthesia and the role of anaesthetists. Most of the patients in our study were not aware of the role of anesthesia, types and techniques of anesthesia, and the role of anesthesiologists inside and outside OT despite the fact that patients having previous surgery.

The fraternity of anesthesiologists has a very important responsibility to educate patients and surgeons about the role of anesthesia, types, techniques, benefits, and also the very crucial role played by anesthesiologists inside and outside OT. This can be achieved by spending more time in PAE clinics, more interaction with patients and familiarizing themselves with the patients before surgery.

### REFERENCES:

1. Uma BR, Hanji AS. "Anaesthesia and Anaesthesiologists: How Famous are We among the General Population?" – A Survey. *J Clin Diagn Res.* 2013;7:2898–900.
2. Mathur SK, Dube SK, Jain S. Knowledge about anaesthesia and anaesthesiologist amongst general population in India. *Indian J Anaesth.* 2009;53:179–86.
3. Naithani U, Purohit D, Bajaj P. Public awareness about anesthesia and anaesthesiologist: A survey. *Indian J Anaesth.* 2007;51:420–6.
4. Prasad CG, Suresh G. A survey on public awareness about the role of anesthesiologists. *Ain-Shams J Anaesthesiol.* 2014;7:456–9.
5. Gurunathan U, Jacob R. The public's perception of anaesthesiologists-Indian attitudes. *Indian J Anaesth.* 2004;48:456–60.
6. Singh P, Kumar A, Trikha A. Rural perspective about anesthesia and anaesthesiologist: A cross-sectional study. *J Anaesthesiol Clin Pharmacol.* 2013;29:228–34.
7. Swinhoe CF, Groves ER. Patients' knowledge of anaesthetic practice and the rôle of anaesthetists. *Anaesthesia.* 1994;49:165–6.
8. Irwin MG, Fung SK, Tivey S. Patients' knowledge of and attitudes towards anaesthesia and anaesthetists in Hong Kong. *Hong Kong Med J.* 1998;4:16–22.
9. Herman CR. An appraisal of the anaesthetist-patient relationship. *Anaesthesia.* 1978;33:45–8.
10. Shevde K, Panagopoulos G. A survey of 800 patients' knowledge, attitudes, and concerns regarding anesthesia. *Anesth Analg.* 1991;73:190–8.
11. Bajwa SJ, Bajwa SK. Anaesthetic challenges and management during pregnancy: Strategies revisited. *Anesth Essays Res.* 2013;7:160–7.
12. Klopfenstein CE, Forster A, Van Gessel E. Anesthetic assessment in an outpatient consultation clinic reduces preoperative anxiety. *Can J Anaesth.* 2000;47:511–5.