

# Awareness about Anaesthesia and Pre-Anaesthetic Checkup Significance among Low Socio Economic Group Population: A Cross Sectional Survey

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## Abstract

*Context:* Even though the branch of anaesthesia is very crucial in hospital, managing acute care, most of the people are unaware of the role played by anaesthesiologist. The unfamiliarity is more in patients belonging to low socio economic groups, which may sometimes lead to medico legal issues. *Aims:* We have conducted a survey, to evaluate the level of knowledge about the speciality anaesthesia and significance of pre-anaesthetic check-up in patients belonging to low socio economic group. *Settings and Design:* The study was done in a public sector hospital, by circulating a questionnaire among patients. *Methods and Material:* A questionnaire was prepared in local language, and circulated among patients scheduled for various elective surgeries in pre anaesthetic clinic. The questions were designed in such a way that each question is a leading question and they can answer either with yes or no form. *Statistical Analysis Used:* The answers marked by the patients were entered in to Microsoft excel sheet and percentages were taken. *Results:* Majority of the patients, didn't have the knowledge about the anaesthesia branch, and also pre anaesthetic check-up. *Conclusions:* We strongly feel that anaesthesiologist has a new task, to market himself, which would not only gain confidence but also help him to avoid legal issues.

**Keywords:** Pre-anaesthetic Questionnaire; Awareness; Low Socio Economic Group; Medico Legal Issues.

## Introduction

Since the time of inception, the branch of anaesthesia has been growing leaps and bounds in the modern medicine. It has been accepted fact that anaesthesiologist play a crucial role in many areas of the hospital services like intensive care units, resuscitation team members, trauma care, pain clinics [1]. On the contrary, this branch looks like an abstract to common people. Anaesthesiologist carries a low profile, when compared to other medical and surgical speciality doctors. Studies have proven that the public knowledge towards anaesthesia branch is very limited in many Asian countries [2,3].

With the introduction of consumer protection act, there is an absolute necessity for anaesthesiologist to

give full details regarding the type of care provided by him in the peri- operative period. But with the limited resources, scarcity of specialist doctors, diversity in population and health care provided in our country, the task becomes more herculean.

Hence we undertook this study, to assess the perception of the branch of anaesthesia, significance of pre anaesthetic check-up among low socio economic group patients scheduled for various surgeries.

## Materials and Methods

After taking institutional ethical committee approval, this study was conducted over a span of

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one year. All patients, who were scheduled for various surgical procedures in the hospital were interviewed for this study. Patients requiring complex surgical procedures like cardio vascular surgeries, neurosurgical procedures, major reconstructive surgeries were not included. A questionnaire was prepared in the local language, and circulated to the patients during their first visit to the pre anaesthetic clinic near the operation theatre in the hospital premises. The questions were structured to assess the patient's knowledge about anaesthesia speciality and also pre anaesthetic check-up.

Children, below the age of 18 years, mentally retarded adults, old age people suffering from dementia were excluded from the study group.

The questionnaire is framed in such a way that after filling the demographic details by the patients, it lead to set of questions. Each one of them is a leading question where they can mark only one option as an answer.

Those who are uneducated, the interview was conducted by anaesthesia registrars and answers were marked by the junior residents working in the department. Patients were not allowed to discuss among themselves, or with their relatives during the interview. The patients who are unwilling for the interview, and those who have incompletely filled the questionnaire or marked multiple answers were also excluded from the study. Patients who are scheduled for emergency surgeries were also not included in the study. The English print questionnaire is given in annexure for reference.

## Results

The answers marked by 500 patients were evaluated at the end of one year in this study. All patients belong to low socio economic group were the annual income is less than 15,000 per month.

The following graph shows the demographic details of the people who were interviewed. The mean values are taken and analysed. Of all patients interviewed, 56.8% were male patients. The educational details were represented in Figure 1.

Of the total interviewed 9.3% people were not satisfied with the pre-operative counselling that they have received and felt that the primary care giver have to spend more time with them. All patients felt that they require some form of anaesthesia and the procedure should be pain free.

56.4% of patients were experiencing surgery for the first time, of the rest 48.8% had experience of some form of anaesthesia. But only 29.2% of the people, remembered that they were examined by anaesthesiologist. The bar diagram in figure 2 tells us about the knowledge of the people before scheduling them for any surgical procedure and planned to receive anaesthesia.

Of the patients interviewed, 94.6% people felt that anaesthesia is a safe branch. 1.7% of people didn't know that there will be a separate branch for anaesthesia, and were under misconception that the operating surgeon only sedates them.

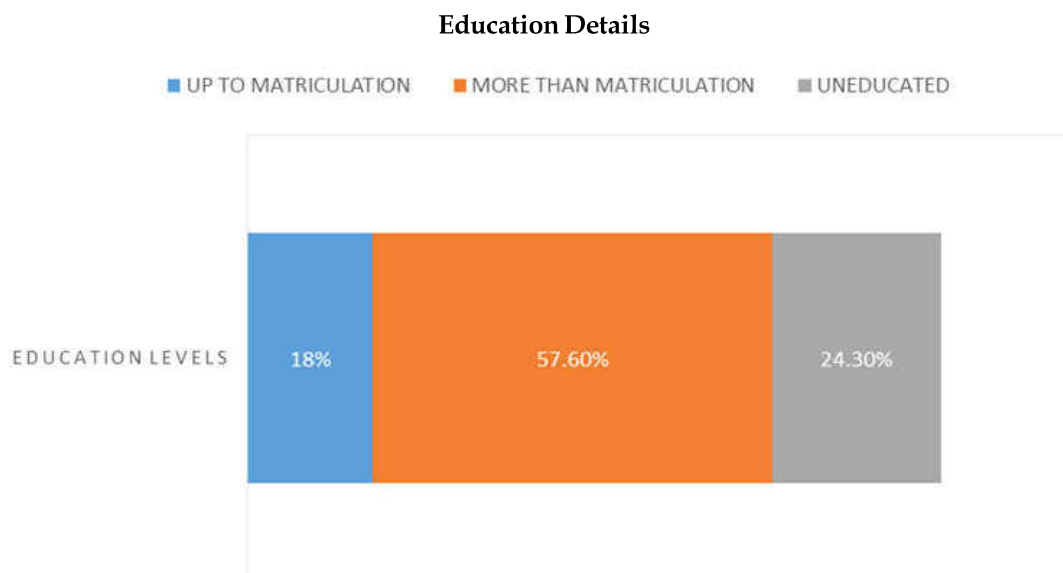


Fig. 1: Education details of the patients included in the study

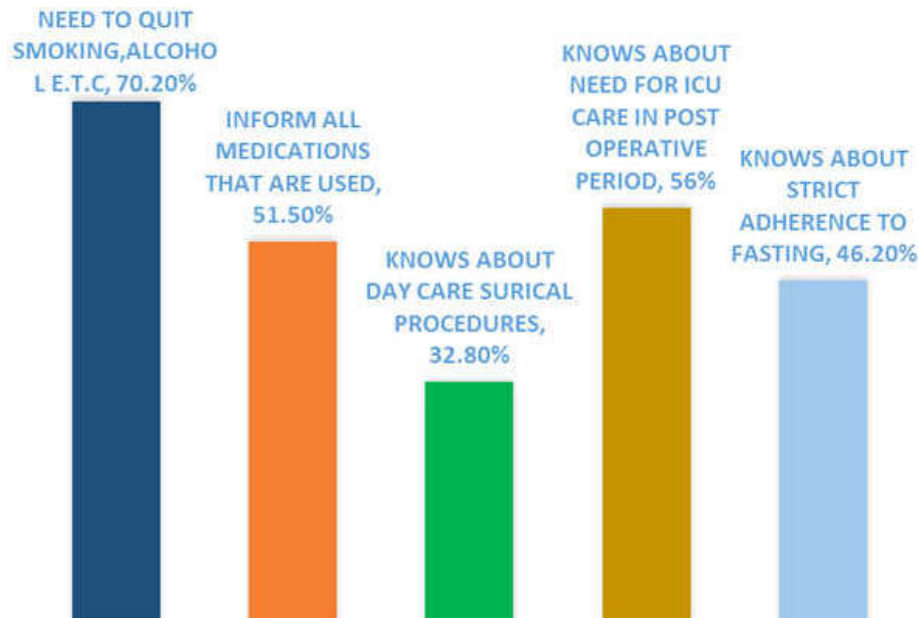


Fig. 2: Percentage of answered questions for various questions by the patients

20.4% of patients felt that their surgical procedure is a major and life threatening, while 40.4% people felt that it is minor in nature. 5.7% of patients had no clue to which category they belong to and rest felt it was a moderate surgery. 77.3% of patients felt that they can lead a normal life after exposure of anaesthesia.

85.7% of patients have no idea regarding various types of anaesthesia that they can be provided with. 48.4% people believe that they will have awareness during the surgery.

### Discussion

The problems of image and status of anaesthesiologists in eyes of the medical and lay communities are not new [4,5]. The profession of anaesthesiology has long been suffering from low appraisal among the general population. This misperception might have affected the anxiety level of patients who are candidates for surgery [6].

Especially in developing country like India, there are various reasons, primarily the time of interaction between anaesthesia provider and patient is very brief coupled with diversity in provision of health care across the country in the private practice of anaesthesia [7]. Adding to this the level of education among the people, especially the low socio economic group. Hence we undertook the present study to know about the patient's perception about the branch of

anaesthesia and importance of pre anaesthetic check-up.

American society of anaesthesiologists have provided practice advisory guidelines [8], and updated it adopting from recent scientific evidence, and emphasised that patient interviews in the pre-operative period, is a vital component which gives us an idea about organization of resources, educate the patient formulate intra and peri operative plan of management and reduce the adverse effects.

The present study spanned over a period of one year, carefully intervening various groups of patients scheduled for various surgeries. The questions are framed in the local language of the patients so that they can understand them easily.

Majority of the people (90.6%) who visited the pre anaesthetic clinic were satisfied about the peri-operative counselling they received from surgeons regarding disease process and their course in the hospital. 40.4% patients have reported that they feel that it is not a major surgery and they can do their daily activities as usual after the procedure. This may be due to the effect of counselling given by the surgeons. Only 20.4% patients felt there operative procedure was a major surgery and feared of pain or increased morbidity in the peri operative period. 5.7% patients didn't understood to which category they belong to and believed in the operative surgeon.

There is strong relation between level of education and the perception about anaesthesia branch. In our study 24.3% of patients are uneducated and they feel

that even though they require anaesthesia they do not have a knowledge of ICU care in post-operative period, day care surgeries, need to inform about comorbid diseases and all medications used by them. This is in coherent with the previous studies done in Indian subcontinent [5]. In comparison to studies done in western world [1,9], where public had an idea about the role of anaesthesiologist in the peri-operative period.

Of all patients interviewed 48.8% had previous history of anaesthesia exposure had a brief idea about this speciality. This was in approximate with the study of Gurunathan et al [10], who have done similar evaluation in 100 patients one day prior scheduling them from surgery. 85.7% of patients didn't have idea about various types of anaesthesia that can be administered to the patients. Birva et al [11] have conducted a same survey among 300 patients and found out that 56.7% of patients had idea about various types of anaesthesia. This sharp contrast could be due to our patients are exclusively belonging to low socio economic status and low levels of education.

Majority of patients believe that anaesthesia is a safe branch, 3.5% of patients have reported that their close kins, or friends had mortality in the peri-operative period. None of them remembered that they were being examined by anaesthesiologist. This could be due to varied practice of anaesthesia in various hospitals [7].

In contrast to western studies [12,13,14], regarding patient concern about intra-operative awareness, 48.4% of patients didn't have fear about this problem, and more so people who are scheduled under regional anaesthesia are more interested about intra operative events. The major concern of all patients was pain in the post-operative period. This is in concurrence with the previous studies done in the Indian sub-continent [5]. 76.8% of patients felt that their anxiety levels, after the pre anaesthetic check-up was reduced. This number can be improved with usage of more number of pictorial, and diagrammatic charts near the pre anaesthetic clinic.

Our study even-though done on limited number of patients, gave us valuable information regarding patient's perception regarding anaesthesia speciality and pre anaesthetic check-up. Our study is unique, as it has concentrated only on patients belonging to low socio economic group, as the hospital admits these group of patients only. The time that is available for anaesthesiologist to introduce himself to the patients and gain their confidence is very brief.

## Conclusion

With the available data we can infer that the branch of anaesthesiologist is still nascent among the low socio economic group. The modern day anaesthesiologist has a new task apart from his routine responsibilities, to market himself. He should take aid of audio visual routes and bring awareness among the common public which will help him to avoid legal issues.

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*Conflict of Interest:* none

## Key Messages

More awareness have to be created by anaesthesiologist among common public to avoid medico legal issues.

## Appendix 1

### Sample Questionnaire

1. Have You Been Explained About The Surgical Procedure And Requirement Of Anaesthesia By The Doctor?  
**Yes/No**
2. Do You Think You Require Anaesthesia Or Can Tolerate Procedure Without Anaesthesia?  
**Yes/No**
3. Have You Been Operated Any Time Before?  
**Yes/No**
4. If Yes Have You Received Anaesthesia Any Time Before In Which Form?  
**At The Site of Operation/ Up To Level of Abdomen/ Total body**
5. Do You Remember That Before Operation Have You Been Examined By Anaesthesiologist?  
**Yes/No**
6. Do You Know That Before Receiving Anaesthesia You Have To Quit Smoking, Alcohol Etc.?  
**Yes/No**
7. Do You Know That Before Receiving Anaesthesia You Have To Inform All Medications Used By

You To Your Doctor?

Yes/No

8. Do You Know That For Few Surgeries You Can Come In The Morning For Admission And After Procedure You Can Be Sent Back To Home On The Same Day Itself?

Yes/No

9. Do You Know That Some Times After Surgery sometimes You Might Be Needed To Keep Patient In Icu Or On Ventilator?

Yes/No

10. Do You Know That Before Receiving Anaesthesia You Have To Be In Fasting State?

Yes/No

11. Do You Know That There Is Specialized Branch Called Anaesthesia Where Your Pain Can Be Treated In Effective Way?

Yes/No

12. Do Any of Your Relatives or Friends Had Any Bad Experience with Anaesthesia Like Death/ Permanent Neurological damage?

Yes/No

13. Which Type Of Surgery You Think You Are Scheduled For?

**Minor/ Intermediate/Major Life Threatening**

14. Do You Know How Many Types Of Anesthesia Are There?

Yes/No

15. Do You Think You Can Lead A Normal Life After Exposure Of Anaesthesia?

Yes/No

16. Do You Fear Of Awareness During Surgical Procedure?

Yes/No

17. After Discussing With Anaesthesiologist Do You Think It Has Reduced The Stress Of Surgery

Yes/No

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