

## STUDY OF AWARENESS ABOUT ANAESTHESIA AND ANAESTHESIOLOGIST AMONGST GENERAL PUBLIC

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### Abstract

**Background:** Anaesthesiology is an upcoming multimodality specialty in medical science with its spectrum ranging from perioperative patient care to pain management, critical care and palliative care. Anaesthesiologists are playing a decisive role in patient management. Anaesthesia and anaesthesiologist from the very beginning has obtained "Behind the Screen" role. The general public still do not adequately recognize their role as anaesthetist, perioperative physician, intensivist and pain physician.

**Aim:** 1. To assess the knowledge about anaesthesia and anaesthesiologists among general public

2. To evaluate the knowledge and importance of anaesthesia during surgery.

3. To know the problems and find solutions regarding unawareness about anaesthesia and anaesthesiologists.

**Material and Methods:** A survey was conducted amongst 1000 participants coming to tertiary care hospital by providing a questionnaire with 12 questions. It was also distributed in vernacular language for those who did not understand English language.

**Results:** 63.4% were aware and 36.6% participants were not aware about what anaesthesia is and what anaesthetists do. 70.0% and 58.7% of participants were aware about anaesthesia & anaesthesiologist belonging to group I (<30 yrs) and group II (>30 yrs) respectively. 66.5% males and 61.1% of females were aware whereas 40% of illiterate were not aware and 66.4% literate were aware about the role of anaesthesia & anaesthesiologist.

**Conclusion:** This study portrays the ignorance among the general population regarding the important role played by anaesthesiologists. This may be because we anaesthesiologists do not spend enough time with patients in the peri-operative period and educate them about our role and our speciality and the less use of electronic media by us.

**Keyword:** anaesthesia and anaesthesiologist

### Introduction

Anaesthesiology is an upcoming multimodality speciality in medical science with its spectrum ranging from preoperative patient care to pain management, critical care and palliative care.

Anaesthesiology is a specialist field of medical science that deals with patients' care before, during and after surgery. The word anaesthesia means 'without sensation'. Safe anaesthesia techniques have reduced the mortality and morbidity among the patients Posted for surgeries.

Anesthesiologists play an essential role in the preoperative, intraoperative and postoperative management of patients. In older days, patients were not aware of anaesthesia's importance, as preoperative check-up and counselling were not done routinely.

Anaesthesia and anaesthesiologist have obtained "Behind The Screen" role from the very beginning, as there was minimal interaction between patient and anaesthesiologist.

The general public does not acknowledge anaesthesiologists and their role in the operation theatre and other areas in health care setups. To increase awareness about this vital branch of medicine should be created. Assessment of awareness about anaesthesia and anaesthesiologist should be done.

Anaesthesiologists are highly qualified and trained who work in and outside operating rooms are still not looked up to compared to their fellow surgeons and physicians by the general public and patients. Few surveys were conducted to know the lack of awareness amongst the general public and patients in the past.1,2

The exact role of anaesthesiologists inside operating theatres and in places like pain clinics, Intensive care units, labour analgesia, MRI suites, cath labs, cardiac setups is still unleashed.

The present study was conducted to find the awareness and knowledge about anaesthesia and anaesthesiologists among the general public, to know the problems and find solutions

regarding lack of understanding about anaesthesia and anesthesiologists.

Aim of this study is:

1. To assess the awareness about anaesthesia and anaesthesiologists among general public
2. To evaluate the knowledge and importance of anaesthesia during surgery.
3. To know the problems and find solutions regarding unawareness about anaesthesia and anesthesiologists.

**Inclusion criteria:** Participants between age 18 to 65 years

**Exclusion criteria:** Patients who are seriously ill

**Material and methods:** A survey was conducted among 1000 participants coming to tertiary care hospital by providing a questionnaire with 12 questions in vernacular language.

This may be because we anesthesiologists are not communicating with the patient and his relative before surgery and after surgery. We have to have a preoperative check-up and counsel the patient regarding the type of anaesthesia duration of anaesthesia and recovery of anaesthesia. We have to educate them about anaesthesia, analgesia, and its importance during any operative procedure. General public should understand the role of anesthesiologist outside operation theatre.

After Institutional Ethical Committee approval, this cross-sectional observational study was conducted at Dr Vasant Rao Pawar Medical College, Nashik, affiliated to Maharashtra University Of Health Sciences Nashik, India.

The survey was conducted by distributing questionnaires to 1000 participants coming to the tertiary care centre in all the three languages English, Hindi and Marathi (local language) according to their preference in 2 months.

Questionnaire was designed based on validated questions of previous studies with a question about addressing the study's objective. The initial part of the questionnaire had the demographic details of the patients. We applied Likert's five-pointer scale for assessing the responses of the participants. If the patients were not educated, the questions were orally asked, and the surveyor ticked their answers.

Positive response was considered if the participants marked "agree" and "strongly agree" options.

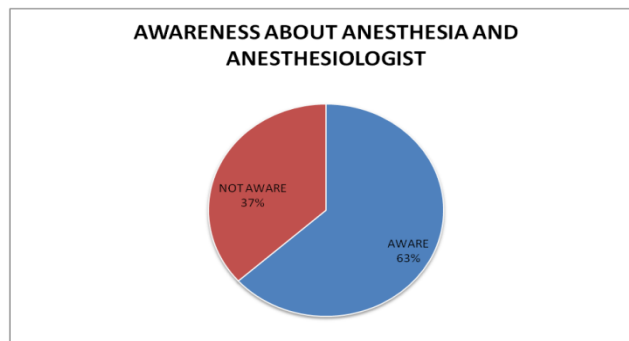
Degree of awareness was determined by the number of positive responses which were as follows-

NO OF POSITIVE RESPONSES	AWARENESS
1-6	NOT AWARE
7-12	AWARE

## Results

**Table 1:** percentage of people aware and not aware about the role of anaesthesia and anaesthesiologist

TOTAL NO OF PARTICIPANTS	AWARE	NOT AWARE
1000	630 (63%)	370 (37%)

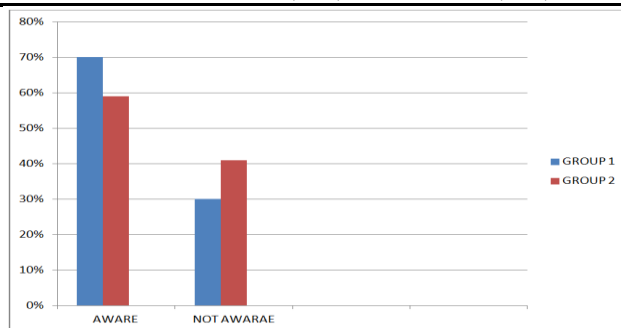


**Figure 1**

63.4% and 36.6% participants were aware and not aware respectively about what anaesthesia is and what anaesthetists do.

**Table 2:** percentage of people aware and not aware divided in two age groups, group i (<30 yrs) and group ii (>30 yrs)

PARTICIPANTS	417(<30 YRS)	583 (>30 YRS)
AWARE	292 (70 %)	344 (59 %)
NOT AWARE	125 (30%)	239 (41%)

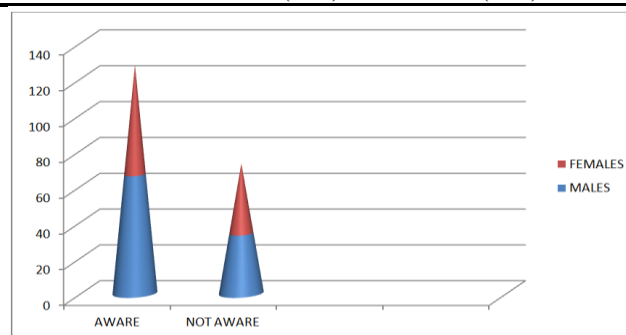


**Figure 2**

70.0% and 59% of participants were aware of anaesthesia & anaesthesiologist belonging to group I (<30 yrs) and group II (>30 yrs) respectively. At the same time, 30% and 41% of participants who were not aware belonged to group I (<30 yrs) and group II (>30 yrs).

**Table 3:** percentage of awareness among males and females

PARTICIPANTS	MALES (436)	FEMALES (564)
AWARE	292 (67%)	344 (61%)
NOT AWARE	144 (33%)	220 (39%)

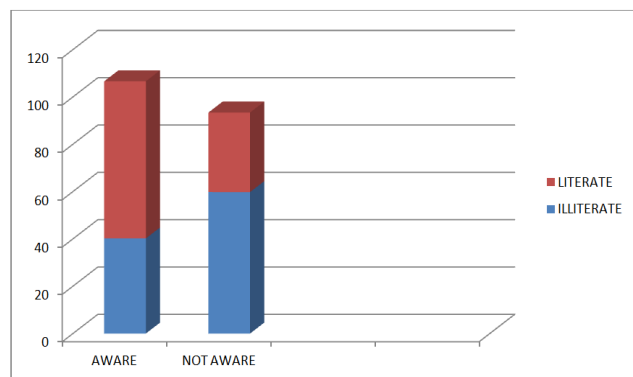


**Figure 3:**

66.5% males and 61.1% of females were aware whereas 33.5% males and 38.9% females are not aware of anaesthesia & anaesthesiologist.

**Table 4:** percentage of awareness among illiterate and literate participants

PARTICIPANTS	ILLITERATE(122)	LITERATE (878)
AWARE	49 (40%)	579(66%)
NOT AWARE	73(60%)	299(34%)



**Figure 4:**

66.4% literate were aware while 33.6% among them were not aware of anaesthesia & anaesthesiologist. Comparing to illiterate participants, 40% were knowledgeable, and 60% were not aware.

## Discussion

Hector Piriz states that “the anaesthetist is every patient’s internist”. However, despite being a fundamental actor at all hospitals, the anaesthetist is still thought to play a secondary role. He further states that separating the three pillars of training anaesthesia, intensive care and pain management, is not an issue. An emerging danger in the practice of new anaesthetists, is the risk of sub-specialisation<sup>3</sup>

Many anaesthesiologists have struggled at some point regarding issues relating to the status and image of the speciality. Development of anaesthesia as a speciality has enabled the advancements in surgical management and critical care. The patients remember more about their surgeons than their anaesthetist<sup>21,22</sup>, maybe because of the limited time we spend communicating with patients resulting in not obtaining adequate patient satisfaction than other specialists. Health care professionals' education may be enhanced by publishing papers in their journals and participating in multidisciplinary hospital committees.<sup>4</sup>

Information that increases public awareness of the role of anaesthesiologist will contribute towards improving the image of anaesthesia.<sup>5</sup>

This survey was carried out to know the public perception about the role of anaesthesiologist and also to educate the public about the speciality.

In our study, 63% were aware of anaesthesia, and the role of anaesthetist and 37% participants were unaware, similarly, in a survey conducted by Prasad et al.<sup>6</sup> 82% awareness was seen, which is in line with another study like by Swinehoe and colleagues that showed 80% of the patients knew about anaesthesia in the UK, whereas in Egypt the awareness was about 60.6%<sup>7,8</sup>

The number of female patients was more in our study (564 females, 436 males) but the percentage of awareness was more in males 67% than 61% in females. The level of education and lack of exposure at these female participants' workplace may have affected their knowledge on anaesthesia. Similar findings were seen in a study conducted by Uma et al.<sup>2</sup>, on the contrary, the number of female patients was less than male patients in studies conducted by Udita Naithani et al.<sup>10</sup> and Usha Gurunathan et al.<sup>12</sup> because of demographic distribution.

Many surveys have also proved the relationship of higher literacy with better knowledge and understanding of anaesthesia on the general population in our countries<sup>10,13</sup>; people don't know that anaesthesiologists are specialist doctors as reported by Naithani et al.<sup>10</sup>, Irwin et al.<sup>11</sup>, Uma et al.<sup>2</sup>, Mathur et al.<sup>9</sup>. Only 10.6% of patients under survey knew about the role of anaesthesiologists outside operating theatres has been found in some previous studies by Gurunathan et al.<sup>12</sup> Herman et al.<sup>14</sup>.

Our study percentage of literate people was more aware (66%) than illiterate people (40%). These results were similar to the results of the study conducted by Mathur et al. They found that most illiterate people thought that the anaesthesiologist is a skilled assistant to surgeon. But the population with education level of matriculation and above had an impression that the anaesthesiologists have some definitive role in the operation theatre. In their study upon asking about the anaesthesiologists in the operation theatre, most people answered that the anaesthesiologists administer drugs once and go away<sup>9</sup>. This was in contrast to the findings of the surveys conducted in developed countries where a majority of patients felt that the anaesthesiologist stays throughout the surgery to closely monitor their vital parameters like pulse, blood pressure and respiration.<sup>14</sup>

Our study found that the percentage of awareness in the age group less than 30 yrs is more (70%) compared to 59% of awareness in participants belonging to the age group more than 30 yrs. This may be attributed to the greater use of electronic and social media by less than 30 yrs.

Dr Bernard V. Wetchler, President of the ASA, stated in 1995, “we (anaesthesiologists) suffer from a lack of recognition for the accomplishments which we have made, a lack of understanding for what we do, (and) how we contribute to the overall safety of our patients”<sup>16</sup>.

Surgeons select the anaesthesiologists who do not even consent for anaesthesia, and it's only as a last line on the surgical consent form. The anaesthesiologists who do PAC and those who perform anaesthesia are different. Many of

the times, Anaesthesiologists visit the patients in the postoperative period only if any complications arise.

Anaesthesiologists need to spend more time during PAC with their patients. They should introduce themselves to the patients and explain their roles peri-operatively, techniques, complications, etc. Anaesthesiologists themselves should explain the risks and take the consents of the patients on separate forms.

The anaesthesia faculty should follow a dress code during PAC, which will help establish a better identification among their patient population. A familiar face (anaesthesiologist) in an alien environment (OT) reduces patients' anxieties significantly.

Anaesthesiologists should participate in public awareness programs like giving interviews in local newspapers, magazines, TV channels, radio etc. The general public can never overlook print and electronic media's importance and effectiveness among the general public<sup>9,16</sup>.

The electronic and print media have a tremendous potential to educate the general population, but this potential has always been underutilised. If the patients have beforehand knowledge through audiovisual or print media about anaesthesiology, they may have an option to inquire and choose their anesthesiologist.

To improve our community image, the needed efforts can improve our communication with patients and increase our community exposure via newspapers, audiovisual media and lectures.

Thus we conclude that ignorance regarding the anaesthesiologists and anaesthesiology is still prevalent among the general population. The existing educational methods are to be evaluated, and newer initiatives are to be looked to disseminate information about anaesthesia. Electronic and print media's involvement in educating the general population, irrespective of their academic status, can substantially impact educating them. Our success in educating the public, other health care professionals and politicians about our role in patient management may play an essential role in our future progress.

### Conclusion

As compared to previous studies conducted in India, there is an increasing trend of awareness about anaesthesia and anesthesiologist, but still illiteracy accounts for major unawareness. Younger (<30years) were more aware, whereas males were more knowledgeable as they were more exposed.

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