



## PERCEPTION OF PRE SURGICAL PATIENTS TOWARDS ANAESTHETIST AND ANAESTHESIA IN A RURAL POPULATION: CAN WE IMPROVE IT?

### Anaesthesiology

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### ABSTRACT

**Context:** Anaesthesiology is still considered as behind the curtain speciality despite so much advancement and perception of anaesthetist is poor among masses.

**Aims:** The aim of our study was to know the perception towards anaesthetist and anaesthesia in rural population and suggest various remedies to improve it.

**Settings and Design:** 424 patients from rural background were included in the study.

**Material and methods:** An anonymous, pretested, semi-structured questionnaire designed for evaluating the perception of pre surgical patients towards anaesthesia and anaesthetist was prepared. The questionnaire consisted of three parts i.e demographic characteristics, perception of anaesthetist and perception and knowledge of patients regarding anaesthesia.

Statistical analysis used: Since this is an observational study, collected data is expressed as percentages.

**Results:** Analysis of the data revealed that knowledge of patients regarding anaesthetist is poor in the study population. Only 67.9% of patients had heard of anaesthetist and among those, 76.7% came to know about anaesthetist when the surgeon told them to get fitness for surgery. Patients were not even aware that anaesthetist stays with them during surgery.

**Conclusions:** In spite of being a multimodal medical branch people know little about anaesthetist and anaesthesia and public perception about anaesthetist remain poor especially in rural areas. A good communication between patient and anaesthetist and a visit by anaesthetist in post operative period will go a long way in improving the perception towards this speciality.

### KEYWORDS

Perception, anaesthesia, anaesthetist

### Introduction

Anaesthesiology is a rapidly evolving multimodal speciality and the practice of anaesthetist has expanded from inside the operation theatre to the areas like intensive care, pain clinic, resuscitation and respiratory therapy etc. Today in the era of robotic surgery the role of anaesthesia and anaesthetist cannot be underestimated. Surgery has always been a traumatic experience in anyone's life but due to advancement in anaesthesia and better monitoring the perioperative period now a day has become less traumatic both for the patient as well as his caretakers. But despite so much advancement, anaesthesiology is still behind the curtain speciality as general public is not aware of the role played by anaesthetist in different areas of patient management. The problems of image and status of anaesthetist in the eyes of the medical and lay communities are not new<sup>1</sup>. Many studies have demonstrated poor public knowledge of anaesthesia and role of anaesthetist in developing as well as developed countries<sup>9</sup>. Rural as well as urban population of a developing country like India seems to be more concerned about surgical part of treatment, be it small but show little concern regarding type of anaesthesia<sup>10</sup>. Most of the surgical patients are not aware of the role played by the anaesthetist in their care during the perioperative period. The scenario is worse in rural areas with people having lower education level and less access to social media. With the changing healthcare environment and advancement in anaesthesiology, the patients and general public needs to be educated<sup>11</sup>. Rationale and aim:

As anaesthesia is a poorly recognised speciality hence anaesthetists should put an honest effort to improve public opinion about their field and thus clear their role in decisive management of patients. With this background, conducted a study with aim to

- 1) Assess the knowledge and perception of anaesthesia and anaesthetist among rural population
- 2) To come up with remedies so as how to educate and increase understanding of anaesthesia among masses and thus build a better anaesthetist – patient relationship.

### Material and methods

**Study area:** Rural population of 250 bedded tertiary care hospital, Government Medical College.

**Study design:** Prospective observational study.

**Sample size:** 424 patients from rural areas admitted for elective

surgery between January to September 2018 were selected for the study. Written informed consent was obtained from the participants.

### Study tool and sampling technique:

An anonymous, pretested, semi-structured questionnaire designed for evaluating the perception of pre surgical patients towards anaesthesia and anaesthetist was prepared. A pilot study was done in ten cases to make sure that the patient understands the language and if required changes can be done at this stage only before proceeding further. The study population was of 18-65 years of age. The patient selection was purely on voluntary basis and they were told that their responses will be kept confidential. Patients who were hard of hearing or with poor general and medical conditions were excluded from the study.

The questionnaire consisted of three parts, first one was regarding demographic characteristics then there were six questions regarding perception of anaesthetist and the third part consisted of five questions regarding perception and knowledge of patients regarding anaesthesia.

### Data analysis:

Collected data was entered in the MS Excel spreadsheet, coded appropriately and later cleaned for any possible errors. Since this is an observational study, collected data is expressed as percentages.

### Results

A total of 424 patients aged 18-65 years answered the questionnaire. Table 1 provides the information about the demographic profile of the patients. Out of 424 patients 40.1% were in the age group of 18-35 years while 35.8% were in the age group of 36-50 years and rest of 24.1% were between 51-65 years. Of these 424 patients 60.9% were females and rest 39.1% were males. Coming to literacy levels 37.3% of patients were illiterate, 21.2% studied up to primary school, 26.4% studied up to secondary school while graduates and post graduates combined were just around 15%. The patients who had undergone previous surgery were excluded from the study to eliminate the bias resulting from their past experience.

**Table 1 Demographic profile**

| Patient variables | Number | Frequency (%) |
|-------------------|--------|---------------|
| Age (years)       |        |               |
| 18-35             | 170    | 40.1          |
| 36-50             | 152    | 35.8          |
| 51-65             | 102    | 24.1          |

|                  |     |      |
|------------------|-----|------|
| Gender           |     |      |
| Male             | 166 | 39.1 |
| Female           | 258 | 60.9 |
| Literacy level   |     |      |
| Illiterate       | 158 | 37.3 |
| Primary school   | 90  | 21.2 |
| Secondary school | 112 | 26.4 |
| Graduates        | 40  | 9.4  |
| Post graduates   | 24  | 5.7  |

Regarding the response of first question which was whether they heard of anaesthesiologist, 67.9% answered yes. But on being asked from where they heard about anaesthesiologist, 76.7% among those said that surgeon told them to go to anaesthetist for fitness before surgery. Only 23.3% of patients had prior knowledge about anaesthetist from the friends or relatives.

**Table 2 Perception of patients about anaesthesiologist**

| Variables   | Number(%) |
|---|-----------|
| <b>Have you heard of anaesthetist</b>                         |           |
| Yes   | 288(67.9) |
| No  | 136(32.1) |
| <b>From where have you heard of anaesthetist</b>              |           |
| Surgeon   | 221(76.7) |
| Relative/ friend  | 67(23.3)  |
| Media   | 0         |
| <b>Role of anaesthetist in OT</b>                             |           |
| Putting patient to sleep during surgery                       | 116(27.4) |
| Pain relief during surgery                                    | 68(16.1)  |
| Maintaining BP, heart rate                                    | 0(0)      |
| All of the above  | 0(0)      |
| Don't know  | 240(56.6) |
| <b>Does anaesthetist stay with you throughout the surgery</b> |           |
| Yes   | 72(17)    |
| No  | 256(60.4) |
| Don't know  | 96(22.6)  |
| <b>Does anaesthetist's role is important during surgery</b>   |           |
| Yes   | 78(18.4)  |
| No  | 54(12.7)  |
| Don't know  | 292(68.9) |
| <b>Anaesthetist play a role</b>                               |           |
| Only in operation theatre                                     | 148(34.9) |
| Outside the operation theatre also                            | 8(1.9)    |
| Don't know  | 268(63.2) |

Regarding the role of anaesthetist in OT 27.4% patients told that the only role of anaesthetist in OT is putting the patient to sleep during surgery. 16.1% patients told that anaesthetist make them pain free during surgery. Others were not sure about the role anaesthetist play in OT and no one was aware that maintaining hemodynamics is also an important role of anaesthetist.

On questioning whether anaesthetist stays with the patient throughout the surgery, majority (60.4%) of the patients answered no. Only 17% answered yes and rest were not sure about their answer.

Regarding the importance of anaesthetist's role during surgery only 18.4% answered yes and majority (68.9%) said that they don't know the importance of anaesthesiologist's role and rest 12.7% said that anaesthesiologist's role is not important during surgery.

In the next question only 1.9% of patients were aware of role of anaesthetist outside the operation theatre. 34.9% patients thought that anaesthesiologist work in operation theatre only. Majority of patients did not know the answer. In the third part of questionnaire patient's perception and knowledge towards anaesthesia was assessed.

**Table 3 Perception of patients about anaesthesia**

| Variables   | Number (%) |
|---|------------|
| <b>Have you heard of different types of anaesthesia</b> |            |
| General   | 78(18.4)   |
| Spinal  | 112(26.4)  |
| Local   | 98(23.2)   |
| All of the above  | 24(5.7)    |
| No idea   | 112(26.4)  |

|  |           |
|--|-----------|
| <b>If given an option which one will you prefer</b>                                    |           |
| General  | 208(49)   |
| Spinal   | 44(10.4)  |
| Local  | 158(37.3) |
| Don't know   | 14(3.3)   |
| <b>How a patient is anaesthetized</b>  |           |
| By giving the drug in the vein   | 58(13.7)  |
| Make the patient smell the gases   | 40(9.4)   |
| Giving the injection at the site of operation  | 130(30.7) |
| Giving the injection in the back   | 94(22.1)  |
| Don't know   | 102(24.0) |
| <b>Most concern or fear about anaesthesia</b>  |           |
| Pain during surgery  | 78(18.4)  |
| Not coming out of anaesthesia  | 0(0)      |
| Backache   | 54(12.7)  |
| Death  | 0(0)      |
| No fear  | 292(68.9) |
| <b>Would you like to have more information about anaesthesiologist and anaesthesia</b> |           |
| Yes  | 378(89.2) |
| No   | 46(10.8)  |

Regarding the knowledge about different types of anaesthesia only 5.7% of patients were aware of all three types of anaesthesia i.e GA/SA/LA while 18.4% thought that anaesthesia means GA while 26.4% patients thought that anaesthesia means giving injection in the back and 13.2% answered local anaesthesia is the only type of anaesthesia. Rest of the 26.4 % did not have any idea of types of anaesthesia.

On questioning regarding their choice of anaesthesia 49% told GA 37.3% told local anaesthesia, spinal is preferred by 10.4 % while the rest 3.3 % could not decide their preference.

On being questioned about how anaesthesia is given, 13.7% told by giving injection in the vein, 9.4% told by making the patient smell the gases, 30.7% told by anaesthetizing the operating region only, 22.1% told by giving injection in the back, while 24% had no idea about how the patient is anaesthetized.

On being asked about the main concern or fear about anaesthesia 68.9% patients had no fear about anaesthesia, no patient was concerned about not coming out of anaesthesia or death. Their main concern was pain during surgery (18.4%) and backache after spinal (12.7%).

On being asked about whether they would like to have more information about anaesthesiologist or anaesthesia, majority of the patients (89.2%) expressed their willingness to know more.

**Discussion:**

A quest for recognition has always been there for an anaesthetist and this starts as soon as one opt for this speciality for post graduation. For an anaesthetist it's frustrating that only few numbers of patients recognise him or her and that too as technicians rather than physicians and rest don't even know about the existence of anaesthetist. In spite of undergoing surgery previously patients learned little about his role as compared to others who have not been patients before.<sup>12</sup> Many studies have already highlighted this issue in developing and developed countries with almost similar results. Historically, the American Society of Anesthesiologists (ASA) has supported a strong campaign to improve the public perception and understanding of anaesthesiologist's role.<sup>13</sup>

In our study we have seen a very poor perception towards anaesthetist and anaesthesia in preoperative patients. A number of studies concluded that education plays an important role to improve perception of anaesthesia as a separate speciality from other medical fields but we want to highlight that more workload and less anaesthetist-patient interaction in our setup plays a major role. Even in developed countries with a high level of literacy the patient may not know the important role played by anaesthetist<sup>14, 15</sup>. Another major reason for poor perception regarding anaesthetist is no post operative follow up of the patients. Thus anaesthetist is missing from the loop in which patient and surgeon deal postoperatively.

But in our opinion not spending enough time with the patient or less communication with the patient seems to be the most important cause

behind this issue. Moreover, a good communication with the physician as judged by the patient is associated with lower incidence of malpractice litigation.<sup>16</sup>

Thus, we would like to help suggest some remedies to improve anaesthetist-patient interaction.

1. The base of good communication should be laid as soon as the patient comes to the surgeon. The surgeon should properly sensitize the preop patient about the need and relevance of the pre anaesthetic check up and briefly about the options of different types of anaesthesia and the person who is going to do that instead of merely telling that get the fitness for surgery from the anaesthetist or show your blood reports to the anaesthetist. This initial sensitization will make it easy for the anaesthetist to establish rapport with the patient.
2. The preanaesthetic assessment should be done in PAC clinics. Although PAC clinics are there in most of the institutes or big hospitals but in many hospitals there is a single anaesthetist who is busy in operation theatre and hardly has time to interact with the patient other than screening him and going through the investigations.
3. Before reviewing the medical record or asking any questions, anaesthetist should introduce himself and explain his role in patient's care. All the patient's queries and concerns regarding anaesthesia preoperatively should be addressed.
4. Use of Spine, airway models and dummies in PAC clinic to explain the patients about different types of anaesthesia and the different options available for undergoing that particular surgery.
5. Consent should be taken by an anaesthetist himself instead of the nursing staff or surgeon. Inadequate information imparted to patients regarding surgery and anaesthesia leads to preoperative anxiety and stress. Thus counselling regarding plan of anaesthesia and explaining complications related to that procedure to patient as well as his attendants will help in decreasing anxiety and stress.
6. A routine postoperative visit by the anaesthetist will not only help in decreasing morbidity but will also give the assurance to the postoperative patient that there is some unseen doctor who equally cares for them like the surgeons do. The postoperative visit will help
  - o To ensure pain free patient thus developing their trust in our field.
  - o To know about their anaesthesia experiences to promote better patient care.
7. Public awareness programmes should be conducted to inform them about the role of anaesthetist.
8. Mass media can help spread awareness in masses.

We strongly believe that taking care of these small points will definitely help in improving anaesthetist-patient relationship and perception regarding anaesthetist which in turn will enhance their perception towards anaesthesia. In our study we found that around 89% patients want to have more information about anaesthetist and anaesthesia, so there is a lot of scope in improving our perception, though this will require a little help from the surgeons as well as the administration and a bit more hard work from our side.

### Conclusion

Although anaesthesia has evolved as a speciality especially in terms of patient safety but not in terms of patient awareness. In spite of being a multimodal medical branch people know little about anaesthetist and anaesthesia and public perception about anaesthetist remain poor especially in rural areas. The root cause of this is less anaesthetist-patient interaction. A good communication will not only help to improve perception of anaesthetist among masses but also lower the incidences of malpractice litigations. Above suggested ways will help in achieving the most awaited recognition for the anaesthetist. It's the fraternity of anaesthesiologists who themselves have to come forward and address this frustrating issue.

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