

# AWARENESS REGARDING ANAESTHESIOLOGY AND ANAESTHESIOLOGISTS AMONG GENERAL POPULATION IN DEVELOPING COUNTRY- A CROSS SECTIONAL SURVEY

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# ABSTRACT

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### INTRODUCTION

Anaesthesiology is one of the youngest branches of medical science that has made immense development. During last 30 years, role of anaesthesiologist has extended not only inside but also outside traditional operating room settings. Anaesthesiologist plays a very critical role in intensive critical care units, trauma centres, and pain clinics and as a member of resuscitation team all over the world.<sup>1</sup> Since last decade there is tremendous health care awareness, mainly in developed countries. In India also people have begun having awareness since CPA (consumer protection Act 1986) has come into existence. But still they have hardly any knowledge of the structure of medical services and practices specially relating to operating room services and anaesthetic management<sup>2</sup>. The knowledge of

**Background:** Anaesthesiologists are playing decisive role in patient management. Nowadays, they are involved in pain clinic and critical care also but the general public know little about them. So this study was undertaken to assess the perception of general population from poor socioeconomic area regarding the anaesthesiology and role of anaesthesiologists.

**Methods**: The study was carried out at Shardaben Hospital, Saraspur, in 200 participants, between the age group of 18-75 yrs of age to assess their knowledge regarding anaesthesiology and anaesthesiologists. A questionnaire containing three parts was filled by asking each question one by one in Guajarati or Hindi. The collected data analysed with SPSS software 17.

**Results**: In our study population, 6.5% were HSC passed and 58.5% were SSC pass. While 24.5% were illiterate and only 10.5% were graduate pass. Only 26% of participants were known about anaesthesiology and role of anaesthesiologists.

**Conclusion**: Results of study showed that the wide spread ignorance and misconceptions about anaesthesiology and anaesthesiologists are still prevalent in general population and these are more in poor socioeconomic area.

Key words: perception, anaesthesiology, anaesthesiologist.

the role of anaesthesiologist and the Anaesthesia speciality among the public is limited.<sup>2</sup>

Public awareness programmes are being arranged in developed countries to spread the awareness on the speciality.<sup>1, 3</sup> For that every year 16<sup>th</sup> October is celebrated as Anaesthesia Day worldwide.<sup>4</sup> However with all this, awareness among public is poor.

The present study was conducted to assess the perception of general population about the anaesthesiology and role of anaesthesiologists.

### MATERIALS AND METHOD

This cross sectional observational study was conducted at Shardaben General Hospital (SCL Hospital), Saraspur, Ahmedabad. Total 200 general population including patients and patient's attendant coming to outpatient department of SCL Hospital, over a period of 4 months- from January 2016 to April 2016 were included. The study population was selected between 18-75 years of age.

Persons who refused to participate, who were hard of hearing or those unable to answer questions due to poor medical condition were excluded from the study.

The participants were explained that their participation in the study is totally voluntary and their responses will be kept confidential. The participants were questioned in Gujarati, Hindi and English. The questionnaire for survey was designed and validated with our departmental faculty. 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 anaesthesiologist. The third part of the questionnaire was based on assessment regarding anaesthesia and its techniques. The questionnaire is given below.

The data obtained was summed up and presented as descriptive statistics using Microsoft Excel 2010. Total numbers of similar responses to a question were grouped and were expressed as proportion of total population using SPSS software version 17.

### RESULTS

Study population includes 200 persons. Out of them 119 were male and 81 were female. Majority, 64% of persons were belonged to younger age group of 18-40 yrs (Table 1).

The study population was divided according their literacy level. As per table 2 only 10.5% of persons were graduate pass.

As per table 3, out of 200 people 26% has knowledge regarding anaesthesiology. The most common source of knowledge was previous exposure of anaesthesia and surgeries (84.61%), followed by from surgeon (15.38%) and from reading was nil.

Out of 200 persons only 52 persons knew the role of anaesthesiologists. Amongst them, we found that less educated people(less than HSC) were knew the Anaesthesiologist as a skilled assistant to surgeon. But the educated population (more than HSC) had perception that Anaesthesiologist plays a definitive role in patient's treatment (Table 4).

Out of 52 persons who have knowledge regarding anaesthesia 11.53% believes that anaesthesiologist administer drug once and go away. Majority of them (48.76%) believe that anaesthesiologist monitor patient during intra operative period only. Only 38.46% have knowledge regarding postoperative role of anaesthesiologist. From these who have knowledge regarding role of anaesthetist in postoperative period 50% answered that anaesthesiologist deals with immediate postoperative complications.

#### Table 1: Age of study group

Age Group	Male (n=119) (%)	Female (n=81) (%)	Total (n=200) (%)
18 to 40 yrs	69 (34.5)	59 (29.5)	128 (64)
41 to 65 yrs	50 (25)	22 (11)	72 (36)

#### Table 2: Education level of participants

Education	Person (%)
Illiterate	49 (24.5)
Up to SSC	117 (58.5)
Up to HSC	13 (6.5)
Graduate	21 (10.5)
Post graduate	0 (0)

#### Table 3: Knowledge regarding anaesthesiology

Do you know about anaesthesiology?	Number (n=200) (%)
No	148 (74)
Yes	52v(26)
Source of knowledge	(n=52)
Told by physician or doctor	8 (15.38)
From previous operation	44 (84.61)
Read somewhere	0

# Table 4: Role of anaesthesiologist in patient's treatment

Type of Role	< HSC (n=37)(%)	> HSC (n=15) (%)	Total (n=52) (%)
As an assistant to Surgeon	33 (89.19)	0	33 (63.46)
A definitive role	0	15(100)	15 (28.84)
No idea	4 (10.81)	0	4 (7.60)

Out of 52 people who had some knowledge regarding anaesthesiology only 21 persons (40.38%) knows that anaesthesiology is a separate medical branch. Majority of them thinks that anaesthesia is given by surgeon only. Our study tried to find out the number of population who were aware of the information given in the consent form which they or their relatives had signed for permission of surgery and anaesthesia. Only 57.69% population had knowledge regarding pre anaesthetic consent. From those who have knowledge regarding anaesthesiology, 50% population knew about general anaesthesia, 44% of population were knew about spinal anaesthesia and 6% of population had no idea about type of anaesthesia. When they were asked about how drug given, 46.15% replied that it

is given both by intravenous route and by inhalation. No one had knowledge regarding complications of general anaesthesia.

Among those who were aware about Anaesthesiology and Anaesthesiologist, 44.23% population had knowledge regarding spinal anaesthesia. And it is mainly due to past exposure of Anaesthesia or operative procedure.

# DISCUSSION

The problem of image and status of the Anaesthesiologist in general population are not new.<sup>5</sup> Regarding issues relating to the status and image of the speciality many, if not all, practicing anaesthesiologist have struggled at some point. Development of anaesthesiology as a speciality has enabled the advancements in surgical management and critical care. In our study a large population did not know the Anaesthesiology as a separate medical branch.

In our study, 26% knew about anaesthesia while in the UK, a study by Swine hoe and colleagues<sup>6, 7</sup> showed that 80% of the patients knew about anaesthesia, whereas in Egypt the awareness was about 60.6%. This is because of poor education and lack of knowledge in our study population.

In our study the source of information regarding the anaesthesiologist as a doctor was mainly from past operative exposure or from surgeon/ physician and not from reading material. The electronic and print media has a tremendous potential to educate the general population, but this potential has always being under-utilized due to lack of awareness and education.

Educating the physicians or surgeons regarding anaesthesia may improve the knowledge that the patients get from them regarding our role in patient management. A survey of 2500 paediatricians who were either involved in preoperative examination of the children or of the opinion that they should routinely examine children preoperatively, revealed that the knowledge of relevant anaesthetic issues was lacking in them.<sup>8</sup>

Naithani *et al.*<sup>9</sup> in a study conducted in tertiary care hospital found that 34.67% knew about the consent and the information provided in the consent form, but only 15.33% had knowledge about anaesthesia risk. The validation of consent seems to be a universal problem as Brezis *et al.*<sup>10</sup>also reported that more than 50% of patients did not remember any information related to consent. In our study 57.69% had knowledge about preanaesthetic consent but none of them knew about complication of general anaesthesia.

The choice of anaesthesia technique for different surgical procedures differs between countries, cultures, personal choice of anaesthesiologists, and patients. Our study showed that 26% knew about the use of different techniques for different procedures because only 10.5% were graduate pass in our study participants. In a study conducted in Pakistan, 82.4% were aware of the existence of different techniques, and 48% preferred general anaesthesia, 33% preferred regional, and 18% were not sure what to choose for caesarean surgery because in this survey, 69% women were graduates and most of them had previous experience with anaesthesia. 11 A study by Ahsan-ul-Haq et al. showed that 60% preferred general anaesthesia compared with spinal anaesthesia when given a choice. 12 These results are much higher compared with previous works conducted in developing countries.13

The patients remember more about their surgeons than their anaesthesiologist, may be because of the limited time we spend in communicating with patients resulting in not obtaining adequate patient satisfaction as compared to other specialists.<sup>14, 15</sup> The education of other health care professionals may be enhanced by publishing papers in their journals and by participating in multidisciplinary hospital committees. Information that increases public awareness of the role of anaesthesiologist will contribute towards improving the image of anaesthesia.

Better knowledge about various anaesthesia techniques and their possible complications in various conditions of patients may reduce the number of medico legal litigations. A good communication with the physician as judged by the patient is associated with lower incidence of malpractice litigation. Well informed patients can select their anaesthesiologists which can help in improving the perioperative care which in turn will reduce the morbidity. The study population in our study and the small sample size are the few limitations to our survey.

## CONCLUSION

The result of the study reflects the wide spread ignorance and misconceptions about anaesthesiology and anaesthesiologists still prevalent in public mind in India.

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