

Awareness in General Public about Anaesthesia and Role of Anaesthesiologist: A Post Covid Perspective

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Abstract

Introduction: The role of anaesthesiologist during the Covid-19 pandemic has been crucial. Being experts in airway management, ventilator management and critical care they have gained an important role in managing various facets of the pandemic. To know if this popularity has translated into increased awareness we conducted a study in our hospital.

Methods: The study was conducted on 150 adult patients and their relatives who visited the PAC and ICU. A questionnaire consisting of 14 questions in both English and Hindi language was given to the participants to test their awareness about role of anaesthetist during Covid and anaesthesia as a speciality.

Results: 54% of our participants were graduates still 50% had awareness of the subject from family, friends and their doctors highlighting the underutilisation of print and electronic media in creating awareness. Most participants knew about anaesthesia prior to covid. Role of anaesthetist during covid pandemic was known to only 34% of them. 58% knew of anaesthesiologist as a separate doctor and most people considered Anaesthesia to be overall safe. Intra and post operative pain was the biggest fear amongst participants. Participants had little knowledge about the role of anaesthesiologist outside the OR.

Conclusion: Covid-19 has thrown some light on the diverse role of anaesthesiologists. Role of anaesthetists in ICU is now being appreciated. But that is meagre in comparison to the vast contribution of the anaesthetists to patient care. People are still unaware of the specialist's role in OR. There is lack of knowledge about the pivotal roles played outside the OR. Increased awareness created by electronic and print media can make a huge difference. Anaesthetists too will have to take up leadership role in educating the general public which will allay undue fears and also increase respect of Anaesthesiologists in the society.

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Introduction

Anaesthesiologists have displayed a pivotal role in the COVID-19 pandemic. Considering that anaesthetists are experts in airway and hemodynamic management, it is not surprising that anaesthesiologists have been on the frontline of the treatment of patients with COVID-19.

Particularly during the most critical phases of the pandemic, anaesthesiologists have contributed considerably to the management of COVID-19 cases in both clinical and surgical intensive care units (ICU), actively participating in airway management teams, developing sedation and

mechanical ventilation protocols, performing ultrasound-guided procedures, providing regional or systemic analgesia, and joining fast response resuscitations teams.[1]

Times magazine cover page (issue April 2020) showing an Italian Anaesthesiologist in PPE ready to fight the Covid virus helped in changing perspective about the speciality. Various big media houses (The Print, The Times, The ABC news) were acknowledging the efforts and work of an anaesthesiologist, some even calling him a hero.[2] In India too Anaesthesiologists were handling ICU

care and intubations along with giving anaesthesia to Covid positive patient. As this news was predominantly from the western countries about increased awareness of the role of anaesthesiologists outside the OR, we were prompted to do our own study among the Indian population to assess this awareness among patients and relatives of patients visiting a tertiary care hospital in Delhi. A number of studies have been conducted time and again about awareness among general public, patients and their relatives about the role of Anaesthesiologists. To assess the status post covid and to know how our expertise in airway, as intensivists, as clinical innovators and as leaders during the pandemic³ has changed the perspective among the general public we presented a questionnaire to patients and their relatives coming for PAC.

Methods

This study was undertaken among the general population (patients and relatives of patients) regarding awareness about the role of anaesthesiologist during the Covid pandemic and also regarding anaesthesiology as a speciality, various roles of anaesthesiologist in and outside the OR and also knowledge about painless labour. The study was undertaken in a tertiary care hospital on 150 adult patients and their relatives who visited the Pre-Anaesthetic clinic and also the relatives of patients admitted in ICU.

Exclusion Criterion

Patients who were critical, those hard of hearing and those who refused to participate were excluded from the study.

Inclusion Criterion

All individuals between age group 18-75 were included in the study. The questionnaire consisted of two parts. First part had demographic information

i.e. age, sex and education. Second part had 14 multiple choice questions aimed to evaluate

- Is the general public aware about the role played by the anaesthesiologist in the Covid pandemic
- Has the pandemic helped in creating awareness about the role of anaesthesiologist outside the OR
- Have they any knowledge about the profession of anaesthesia and role played in intraoperative and postoperative period.
- Can anaesthesiologist make normal labour painless.
- The questions were in both Hindi and English . Each question was verbally explained as some were either illiterate or couldn't understand the exact meaning.

Results

Demographic Pattern

Male and female distribution was 42.7% and 55.3% respectively. Females being slightly higher in numbers as they usually accompany patients more frequently to the hospital.

Education Status

More than half (54%) were graduate, 18.7% and 12.7% were intermediate and high schoolers respectively , while 14.7% had no formal education. 79% of the responders were aware about Anaesthesia (both hindi and English responders) while 8.8% were completely unaware and 12.2% were not clear about it.

It's interesting to note that family, friends and interaction with doctors were the source of awareness about anaesthesia in 50% of the survey participants.

Social media contributed only in 19.7%. Newspapers had a very small contribution in creating awareness.

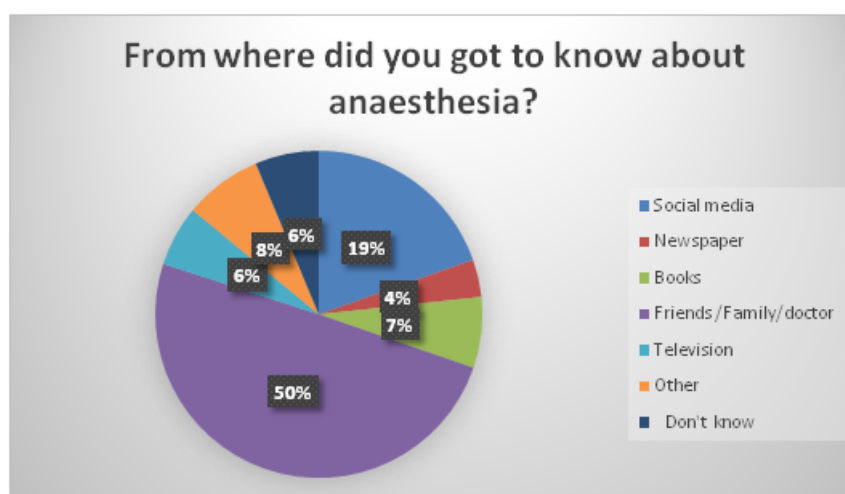


Figure 1:

Most participants had knowledge about Anaesthesia prior to the Covid pandemic, nearly 60% of them. While 23.8% had no awareness about it.

Despite the role of anaesthesiologists being central in covid management and highlighted in media, only 34% of participants gave a positive response. Rather 17.6% thought that anaesthetists had no role and the majority 59.4% were not sure.

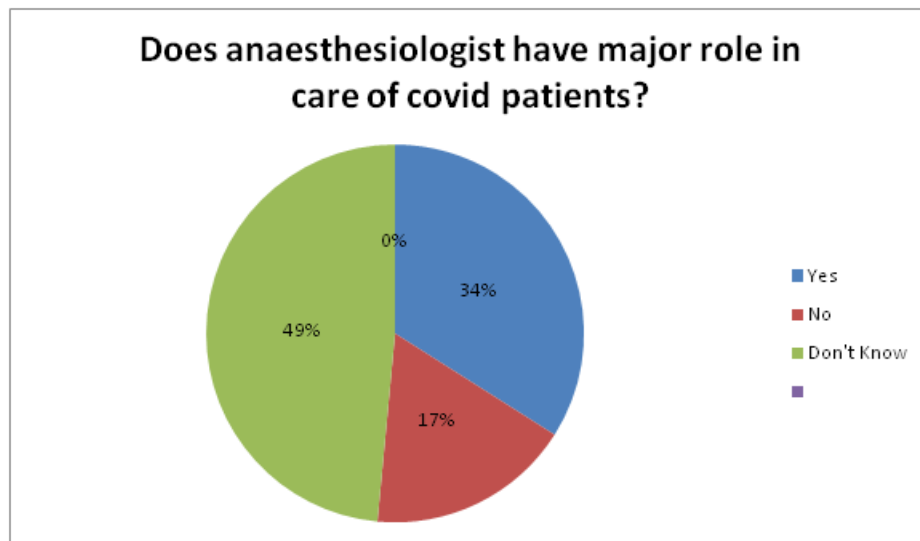


Figure 2:

The percentage of participants having knowledge that anaesthesia is required for surgery was 56.3%. In this age of science and more access to knowledge it is surprising to see that nearly 19.4% still believe that surgery can be done without anaesthesia.

Nearly the same percentage who know that anaesthesia is required for surgery also know that it is administered by a separate doctor called anaesthesiologist (58%). While 14% and 9% believe that it is given by either the surgeon or the nurse respectively.

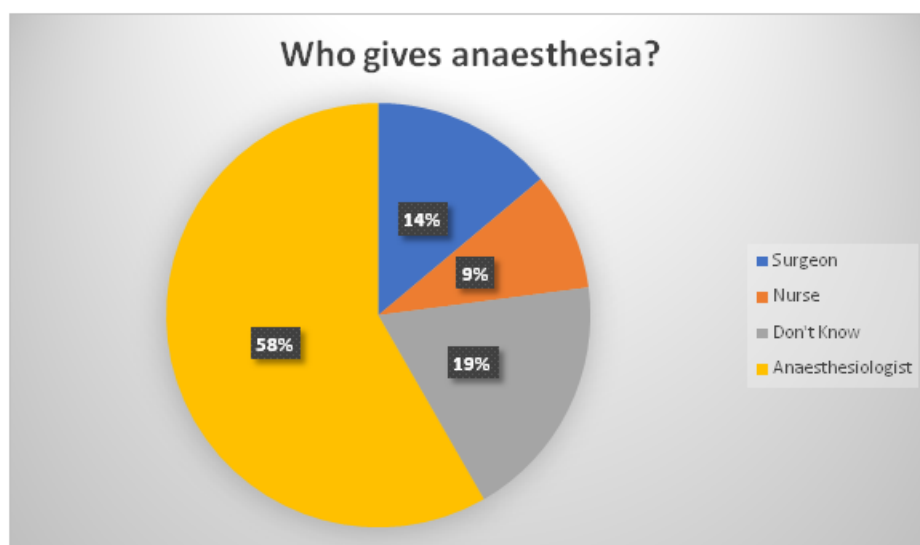


Figure 3:

While more than 66% consider anaesthesia to be either completely safe or slightly risky but overall safe, 8.4% consider it not safe.

Only 15.4% of the participants had idea that it was the anaesthetist who resuscitated the patient during surgery. Majority believed that the patient was resuscitated by the surgeon, nurse and anaesthetist.

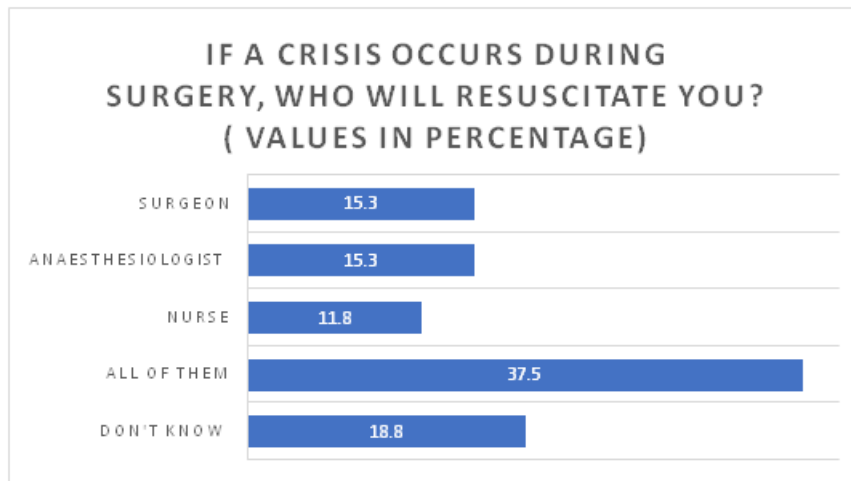


Figure 4:

Patients are now aware that anaesthesiologists have some role in ICU (nearly 39.6%). But majority either don't know or think that anaesthetists have no role in ICU.

Though women participants are more in our study still only 16.1% know that labour can be painless. Majority feel that there is always pain during normal delivery.

Only 35% knew that anaesthetists had some role in post operative period. Though on further questioning they were not aware of what all the anaesthesia doctor does. 35% thought they had no role and 22% didn't know about it. The biggest fear among participants if they had to undergo any surgical procedure was Pain. A few were however worried about awakening after the procedure.

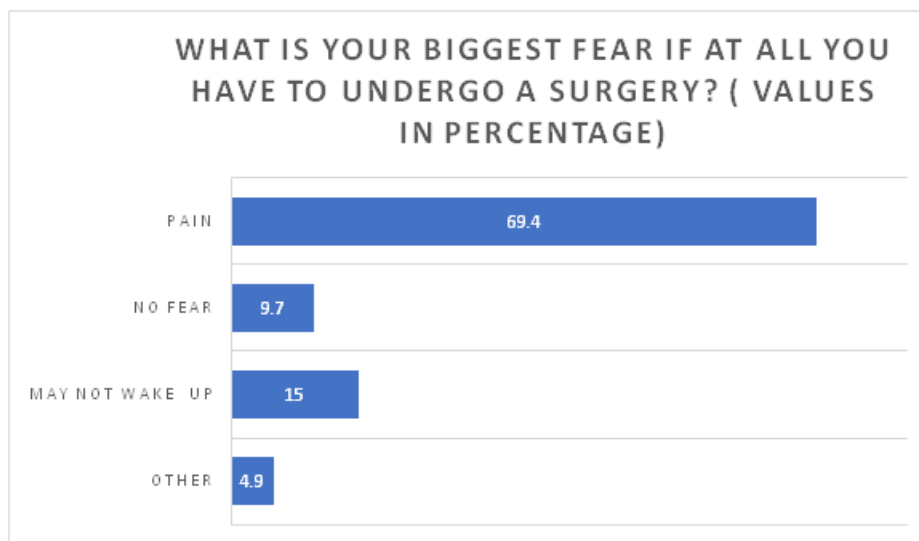


Figure 5:

It's good to know that those who have some knowledge of anaesthesia also believe, (nearly 70%) that the role of anaesthesiologist is as important as any other speciality.

Discussion

Prior studies had observed the reason for decreased public awareness about role of anaesthesiologists is that their not spending adequate time with patients. Surgeons are closer to patients as they meet them daily and frequently. Patients' knowledge of the diverse roles of anaesthetists, especially those beyond the confines of operating theatres, are very poor worldwide.[5,6,7] In our study nearly 78% of participants had heard of Anaesthesia. Most

participants had heard of anaesthesia from family, friends or their attending physician or surgeon.

In our study newspapers and magazines play a meagre role in increasing awareness but we strongly believe that electronic and print media has a tremendous potential to educate the public. This potential can be utilised so that patients have a right to choose their anaesthesiologist and avoid undue fear prior to their surgical procedures. In a study conducted in Ghana on patients their source of

knowledge was health talks organised in health care facility.[8] Such talks should be a part of Indian Government hospitals too as they can make a huge difference.

As Covid pandemic has brought anaesthesiologists to the forefront, we wanted to know its impact on the general public in India. What our study concluded is -2/3 of patients knew about anaesthesia prior to Covid 19, but only 1/3 of our participants knew about their role in care of covid patients. TV media played a very important role during the pandemic. But the discussions on TV which invited doctors saw very few anaesthesiologists among them. More participation of anaesthesiologists could have made general public aware about their role. Television should have aired programmes on the role of anaesthesiologists. Our study showed that newspapers played a minor role in awareness, the reason being they didn't include much articles about anaesthesiologists in their publications. Though some newspapers in India did publish articles, they were mostly English newspapers. Articles in local newspapers could have created more awareness. Greater involvement of anaesthesiologist in delivery of information to the general public too could have helped.

An article by D'Agostino F. et al in Italy concluded that during Covid 19 pandemic patients have knowledge about the role of anaesthesiologists and anaesthesia practice. Information can however be improved by providing more educational material prior to surgery.[9]

Study by Prasad et al concluded that Indians have less knowledge than the West about the role of anaesthesiologist and they need to conduct awareness programmes in the health facilities and also via electronic and print media.

Only 59% of participants know that anaesthesia is given by an anaesthesiologist. This is in contrast to earlier studies in Urban population in India showing a high percentage of up to 90%. The reason being our hospital caters to rural migrants from nearby states among which many were poorly educated. Those who had formal education up to graduation had some idea about the speciality again puts spotlight on the importance of education. This underlines the importance of making them aware about Anaesthesia during PAC and in OR.[4]

In our study only 28% participants had previously undergone surgery so we could not assess whether having a previous exposure to anaesthesia increased awareness.

Earlier studies by Prasad and Suresh and Prakash et al had however revealed that prior surgery did not increase awareness among patients. This highlights the need for repeated educational programmes as people tend to forget short interactions.

Surveys conducted in developed countries show that majority of patients felt Anaesthesiologists stayed throughout surgery to look after breathing, blood pressure and IV fluids¹⁰. In our study majority either felt that his/her work was over after giving Anaesthesia or were unsure about it stressing the need for educational programmes among general public.

Study done by Onutu et al, in Romania showed that 46.2% of the study population viewed resuscitation as a combined effort of surgeon and anaesthetist [11]. In our study 37% viewed it to be a combined effort slightly less than the Romanian study, while only 15% knew it was the anaesthetist who resuscitated the patient during surgery.

In our study nearly 70% were afraid of intraoperative and postoperative pain. This is important in terms of analgesia provided by anaesthetist in the post operative area. In comparison in Western studies the main fear was awareness during anaesthesia and failure to gain consciousness followed by pain.[12] Our patients had no knowledge about awareness during anaesthesia. In Asian studies the major preoperative concern was pain followed by failure to wake up'[13]

Patients' knowledge of the diverse role of anaesthetists, especially beyond the confines of the OR are very poor worldwide'[14]. While in our study 40% knew about the anaesthetist's role in ICU, in a study by Agarwal M et al [15] only 26% were aware of this role. It is heartening to note that general public is slowly becoming aware about the diverse roles of the Anaesthesiologist.

Only 16% of our patients had knowledge about painless labour in contrast to study by Nathini et al [16] where majority had knowledge of painless labour from an article in local daily. This again stresses the need for frequent write ups in Newspapers and videos on social media to raise awareness.

The study highlights the importance of interaction between the anaesthesiology stand patients in pre operative clinic, in the OR and also in ICU. Their role needs to be publicized through internet and social groups as majority of the population have smart phones and internet. Anaesthesiologists should participate in public awareness programmes like giving interviews in local newspapers, magazines, TV shows and radio. Like Private hospitals, Government hospitals too should have printed brochures in local languages for patients. Organising resuscitation drills as has been done by ISA in recent past is also a good initiative to increase awareness. These in our view will go a long way to increase patients' knowledge about the role of Anaesthetist and improve the image of the speciality.

Thus we conclude that though the Covid pandemic had highlighted the role of Anaesthesiologist but the message was sparingly disseminated among the general public. We need to make consistent efforts and educate not only the general public but other health care professionals and politicians about our role.

Study Limitations

This study has potential limitations:

- 1) Limited Sample Size
- 2) The participants of the study come from a small geographic area which may not be representative of whole of India.

Conclusion

The study concludes that Covid 19 pandemic did create some awareness among the masses about the role of anaesthesiologist in the ICU which is however not satisfactory.

At the same time the results have reflected a lack of knowledge about the speciality in developing countries. People still consider anaesthesia is all about putting patients to sleep and waking them up. The role of anaesthetist in OR beyond giving anaesthesia has to be stressed upon. Anaesthesiologists must make more efforts in educating people regarding their role beyond the confines of OR.

Our study also showed that people consider Anaesthesiologist to be an important speciality just as physician, surgeon etc. however educating them about the diverse roles the anaesthetist plays will ensure holistic health care delivery.

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