



IJCRR

Section: Healthcare

Sci. Journal Impact

Factor: 6.1 (2018)

ICV: 90.90 (2018)



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Awareness Regarding an Anesthesia and Anesthesiologist in Patients and Attendants Coming to OPD in Dhiraj General Hospital: Observational Survey

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ABSTRACT

Introduction: Though the role of an Anesthesiologist is crucial, it's knowledge to the public is limited. It is, therefore, imperative for us to ponder over why the importance of this speciality is still under the shades and also, ways to make people aware of their vital role.

Objective: The present study was conducted to assess public knowledge about the role of anesthesiologist and anaesthesia.

Methods: It was a cross-sectional study with study population from 18-60 years and a sample size of 500 patients. The allowable error is 5.77% and a confidence interval of 95%.

Results: When all people interviewed were asked if they would like to know more about Anesthesiology as a field of study and Anesthesiologist as a medical profession, majority of 60% showed their interest in knowing about it, 23% were not sure while only 17% denied knowing more about it. Among 500 people asked, 65% did not know if an anesthesiologist is a doctor while only 33% said yes.

Conclusion: The results highlight the urgent need of the awareness programs and camps to create awareness in the general population to highlight the importance of anaesthesia and the need of the anesthesiologist for their best care.

Key Words: Awareness, Anesthesiologist, Anesthesia

INTRODUCTION

In ancient times, surgeries were done in barbaric form without any anaesthesia and analgesia. Anaesthesia is a state of temporary controlled loss of awareness or sensation induced for medical purposes. Study of Anesthesia is called Anesthesiology and the professional trained in Anesthesiology including preoperative medicine is called as an Anesthesiologist. First successful demonstration of the anaesthetic agent was showcased by William Thomas Green Morton in 1846¹, and its use has been growing since then. Anaesthesia has become one of the most advanced specialities of modern medicine. As the knowledge regarding Anesthesiologist is limited amongst the public. Thus, we should take measures to make public awareness regarding their role and speciality.³ The

study was conducted to assess public knowledge about the role of the anesthesiologist and anaesthesia in Dhiraj General Hospital, Gujarat, which is a tertiary level health care centre associated with a medical college.² The study aimed to survey for awareness regarding anaesthesia and anesthesiologist in patients and attendants coming to OPD of Dhiraj General Hospital. The objective of the study was to assess the awareness regarding Anesthesia and to assess the awareness regarding Anesthesiologist in literates and illiterates.^{3,4}

MATERIALS AND METHODS

It was an observational study with a study population from 18-60 years and a sample size of 500 patients. The allowable error is

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ISSN: 2231-2196 (Print)

ISSN: 0975-5241 (Online)

Received: 12.08.2020

Revised: 22.09.2020

Accepted: 24.11.2020

Published: 05.01.2021

5.77% and a confidence interval of 95%. The inclusion criteria included Age > 18 years < 60 years, subjects willing to sign the informed consent and patient and their attendants coming for pre-anaesthesia check-up to PAC. The exclusion criteria included subjects with loss of hearing or vision or both and subjects refusing to take part in the study. After obtaining permission from the institutional ethical committee the study was conducted in OPD of Dhiraj General Hospital, S.B.K.S.M.I.R.C. with ethical approval letter no. SVIEC/ON/Medi/SRP/19037. We studied patients and attendants coming to pre-anaesthesia check-up clinic for the duration of 2 months (20/07/2019 to 1/10/2019). This is a cross-section study of nature. All the participants in the study were explained clearly about the purpose and nature of the study in the language they can understand. They were included in the study only after obtaining written informed consent. Data was collected by a personal interview with every individual. The individuals were randomly selected. Data was collected in the pre-tested, pre-formed questionnaire as shown in table 1. Literate was defined as anyone having an education above 7th grade.

Statistical Analysis

Collected data were compiled in Microsoft office excel 2007 format. Data will be processed using EPI info statistical software. Descriptive and analytical, statistical methods were used for the preparation of results. Data is presented in graphical format.

RESULTS

The questions were asked to the patients and the attendants, out of 500 people, it was observed that 61% underwent any kind of surgical procedures. Out of these, 156 attendants were administered local anaesthesia, 58 general anaesthesia and 91 were not aware of either any of these. Amongst the people interviewed, 61% did understand the importance of the anaesthesia given and were aware of it while the 39% of them had no idea regarding the same.

The majority, that is 71% of the patients and attendants asked, was unaware about anesthesiology being an entirely different medical discipline while 29% were aware of the same (Figure 1).

Although 61% of the population had experienced anaesthesia, when asked about the method of administration of Anesthesia, most of them had no clue or the other. 50% identified with the administration of Anesthesia via injection in the back, 36% said intravenous, 11% said via gas from a mask while only 3% thought it was via an oral tablet (Figure 2).

On asking the concerned regarding the professional administering Anesthesia, majority, that is, 44% knew that it was by a medical professional trained particularly in this field, while

29% and 14% thought it was either via a Surgeon or a Nurse respectively, while 13% did not have any idea (Figure 3). As seen from the pie chart in figure 5 of 500 people asked, 65% did not know if an anesthesiologist is a doctor while only 33% said yes. The role of an Anesthesiologist in an OT had varied answers. 53% thought it was pain management, 31% did not know their role while only 16% knew that it was to administer drugs, monitor patient throughout and manage pain post-surgery. 49% correctly identified the fact that Anesthesiologist does stay with the patient during the entire operation while 51% denied (Figure 4).

On a majority, i.e. 95%, people did identify that the Anesthesiologist was as important as the surgeons while only 5% claimed that they were not important at all. One of the questions did ask the source of information on which the patients and attendants were basing their answers on. 35% said that it was Friends and Relatives, 61% said it was the experience while only 4% said it was any other media including TV, Radio, etc. When all people interviewed were asked if they would like to know more about Anesthesiology as a field of study and Anesthesiologist as a medical profession, 60% showed their interest in knowing about it, 23% were not sure while only 17% denied knowing more about it (Figure 5).

Prevalence of awareness regarding anesthesiologist in literates and illiterates was found to be 33.96 and 10.32% respectively. (Figure 6) Similarly, the prevalence of awareness regarding anaesthesia in literates and illiterates was found to be 27% and 17.46% respectively (Figure 7).

DISCUSSION

In 2009 Mathur S K, Dube S K, and Jain S found that decisive role was played by anesthesiologists in patient management. Use of better patient monitoring, pain management, critical care and newer and safer anaesthetic drugs are the basis of present-day Anesthesiology. But these developments are not known to the general public. To assess the perception regarding the Anesthesiology and anesthesiologist among the general population, the study was carried out on 300 persons between the ages of 18 and 75 years. The study population was categorized as per their educational status and divided into 5 groups. Only 19.51% of the illiterate population, 58.57% of literates and 87.88% of the postgraduate population were aware of Anesthesiologist as a doctor. It was shocking to know that 100% of illiterates, 73.87% of up to matriculation, 64.29% of graduate and 51.52% of postgraduates did not know Anesthesiology as a separate medical discipline. The results reflect that ignorance and misconceptions about Anesthesiology and anesthesiologist are still prevalent in public in India.³

In 2016, Bhandarey et al. explained that 40% of the patients did not know that during surgery anesthesiologists

are in charge of anaesthesia. Among the patients' who had previous anaesthetic exposure, 69.4% felt that the anesthesiologist is the doctor who is in charge of anaesthesia. But, these patients knew very little about the roles of anesthesiologist inside and outside the operating room. Interestingly 51.7% of patients were interested to receive an explanation of anaesthesia preprocedural by an anesthesiologist.⁴

In the year 2018, Singh T, Sharma S explained that anaesthesia is one of the most advanced specialities in modern medicine. But, public awareness toward anesthesiologist and Anesthesiology is limited. Patients and attendants were assessed regarding the knowledge of anesthesiologist and Anesthesiology in this study. The study was carried out on 250 adult patients and attendants visiting OPD at a rural hospital in New Delhi. Over 3 months Interview was conducted in the pre-structured questionnaire in the local language. The participants based on their answers were divided into two groups, aware or unaware. Analysis of data was done using SPSS version 17. Though they were aware of the regional and general anaesthesia techniques, they were not aware of the role of anesthesiologists, in the OT and the postoperative period and about Anesthesiology as a separate medical discipline. 55.6% of participants had good knowledge, and it was significantly associated with age, sex, and education ($P < 0.001$). Active measures for educating the public and professionals are required.⁵

Thus, the above studies are in congress with my study and indicate widespread unawareness amongst the public about the role of anesthesiologists inside and outside the operating room. Therefore, they should educate about anaesthesia and the various roles of an anesthesiologist. The pre-anaesthetic check-up period should be used to fulfil this purpose. From the above study results, we could say that there is a lack of awareness in the general population regarding anaesthesia and anesthesiologist. It was found that the prevalence of awareness in the literate population regarding anaesthesia and anesthesiologist is only 33.96% and 27% respectively. While in the illiterate population, it was 10.32% and 17.46% respectively. The above results show that there is an insignificant difference in the prevalence regarding awareness of this medical profession in the literate and illiterates. This study also highlights that role of anesthesiologists apart from the O.T. is less known.⁶

However, if more time is spent with the patient in the preoperative check-up room and explaining the various modes of anaesthesia, the patients and their relatives will become more aware of anaesthesia and anesthesiologist and will also help in meeting the psychological needs of the surgical patient thus reducing the pre-operative anxiety.⁶

CONCLUSION

The present research investigated the awareness about the medical speciality Anesthesiology and the anesthesiologists who are continuously striving for the treatment of the patient. These results highlight the urgent need of the awareness programs and camps to create awareness in the general population to highlight the importance of anaesthesia and the need of the anesthesiologist for their best care. There is a need that the awareness programs are so designed/planned that could effectively help in making both literate and illiterate sections of the society aware about the very important roles of the anesthesiologist in healthcare and also the anesthesiology as a whole. This study was done in the pre-covid era, thus need to review the study after the Covid-19 era as the Covid-19 has brought the role of the anesthesiologist to the forefront.

ACKNOWLEDGEMENT

Authors would like to express their gratitude towards the Department of Anesthesiology, Smt. B. K. Shah Medical College and Research Centre, Piparia, Vadodara and Hospital management for their constant support encouragement for the successful completion of the study and utilizing the facilities. Authors acknowledge the immense help received from the scholars whose articles are cited and included in references to this manuscript. The authors are also grateful to authors/editors/publishers of all those articles, journals and books from where the literature for this article has been reviewed and discussed. They are also thankful to the subjects of this study for their valuable participation. Authors also grateful to IJCRR editorial team and reviewers to bring the quality of this manuscript.

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Table 1: Questionnaire

- 1) Have you ever undergone any surgery in past?
(a) Yes (b) No
If yes then: a. Local Anesthesia b. General anesthesia c. None
d. Don't know
- 2) Do you know about any form of analgesia is given before or during the surgery?
(a) Yes (b) No. (c) Don't know
- 3) Is Anesthesiology a separate medical discipline?
(a) Yes (b) No (c) Don't know
- 4) How is the anesthesia administered to patients? By
(a) intravenous injection (b) injection in the back (c) oral tablets (d) gas from a mask
- 5) Is Anesthesiologist a doctor?
(a) Yes, I know (b) No, I don't know
- 6) Who gives Anesthesia to a patient, according to you?
(a) Surgeon (b) Nurse. (c) OT technician (d) Some other medical professional trained in this work (e) Don't know.
- 7) The role of Anesthesiologist in treatment are:
(a) Skilled Assistance (b) Other role (c) Don't know
- 8) The role in post-operative period is:
(a) Patient monitoring. (b) Manage post-operative complications (c) Manage pain
(d) All of the above (e) Don't know
- 9) The role played by Anesthesiologist in OT is:
(a) Administer drugs only (b) Administer drugs and monitor patients throughout the operation (c) Manage pain. (d) All of the above. (e) Don't know
- 10) After administration of Anesthesia, do you think that the Anesthesiologist stays in the OT with the patient?
(a) Yes (b) No (c) Don't know
- 11) Who, do you think, monitors the patient during the surgery?
(a) Surgeon (b) Medical student (c) Nurse. (d) None of these
- 12) What do you think about the importance of an Anesthesiologist for surgery?
(a) Not at all important. (b) Slightly important. (c) Equally important as the surgeon
- 13) Would you like to meet your Anesthesiologist before surgery {if ever had}.
(a) Yes (b) No (c) Don't know
- 14) On what do you base the source of information used to answer all the questions above?
(a) Any past history of surgery (b) From Friends and relatives
(c) Any media (Internet, television, radio, etc)
- 15) Would you like to know more about the work of Anesthesiologist?
(a) Yes (b) No (c) Maybe

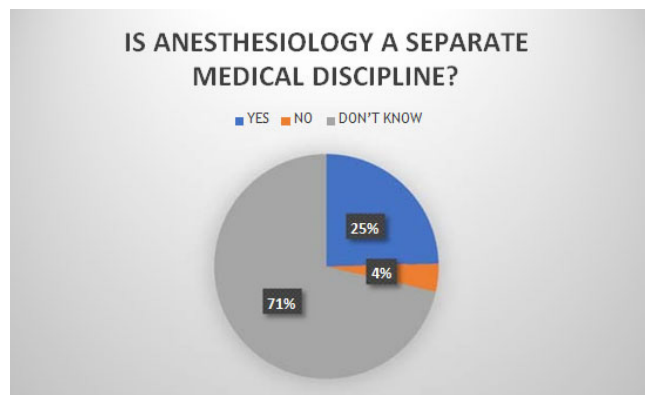


Figure 1: As in the pie chart below, majority, that is 71% of the patients and attendants asked, were unaware about anesthesiology being an entirely different medical discipline while 29% were aware about the same.

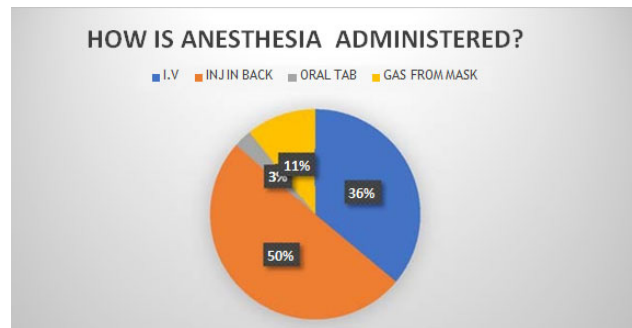


Figure 2: When asked about the method of administration of Anesthesia, most of them had no clue or the other. 50% of the total identified with administration of Anesthesia via injection in the back, 36% said intravenous, 11% said via gas from a mask while only 3% thought it was via an oral tablet which you can see in the pie chart below.

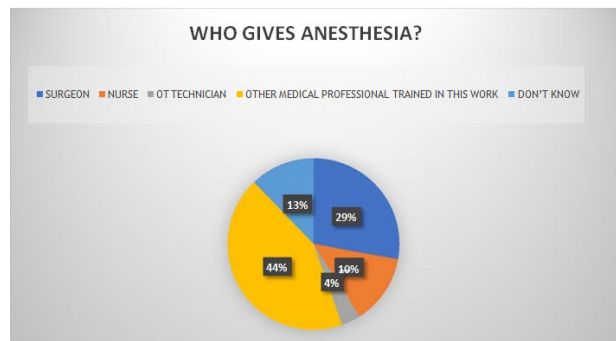


Figure 3: On asking the concerned regarding the professional administering Anesthesia, majority, that is, 44% knew that it was by a medical professional trained particularly in this field, while 29% and 14% thought it was either via a Surgeon or a Nurse respectively, while 13% did not have any idea as obvious from the pie diagram below.

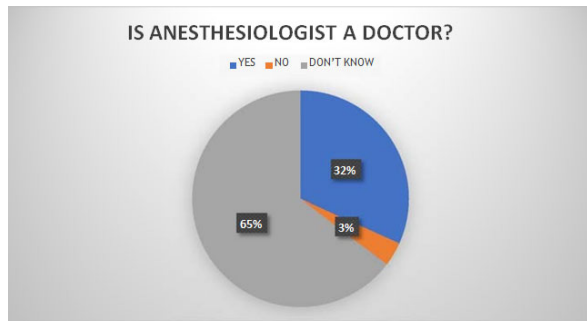


Figure 4: As seen from the pie chart below, of 500 people asked, 65% did not know if an anesthesiologist is a doctor while only 32% said yes.



Figure 5: When all people interviewed were asked if they would like to know more about Anesthesiology as a field of study and Anesthesiologist as a medical profession, majority of 60% showed their interest in knowing about it, 23% were not sure while only 17% denied knowing more about it as displayed below in the pie diagram.

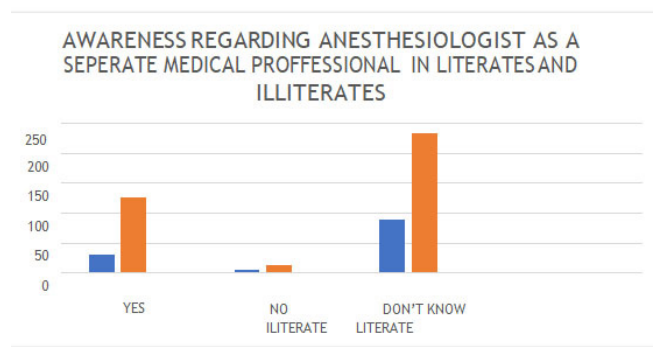


Figure 6: Prevalence of awareness regarding anesthesiologist.

- Illiterates – 10.32%
- Literates – 33.96%

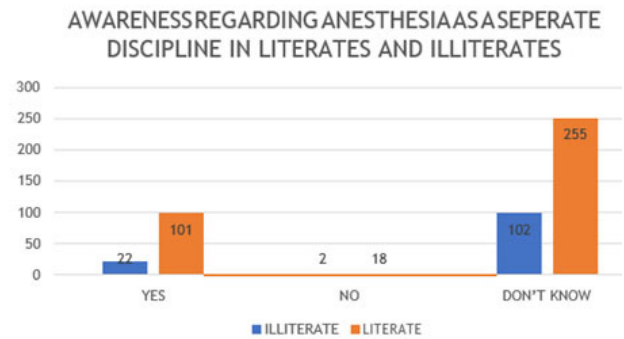


Figure 7: Prevalence of awareness regarding anesthesia.

- Illiterates – 17.46%
- Literates – 27%