

## Assessment of Paramedical Staff's Knowledge Regarding Speciality of Anesthesia and Anesthesiologists: A Questionnaire Based Study

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### Abstract

**Background:** Paramedical staff is the cornerstone of health care system. Knowledge of paramedical staff regarding different specialty is of paramount importance for the efficient delivery of healthcare services. As anesthetist are frequently involved in the emergency care of a patient, knowledge of paramedical staff regarding anesthesia and the role played by anaesthetist can help in the efficient and timely delivery of health care needs of patient which ultimately results in the better patient outcome. **Aim:** To assess paramedical staff's knowledge regarding anesthesia and anesthetist. **Method:** 100 paramedical staff posted in the different department were selected for the study. They were administered a set of questionnaire face to face orally by an investigator and responses from individual participant were recorded. The data collected were subjected to simple statistical analysis. **Results:** 75% of paramedical staff knew that anesthetist is a specialist doctor. 40% of participant knew that anesthetist are concerned with the post-operative care of a patient and only 25% of candidates were aware of role of anesthetist in ICU. Very few participants knew about the role of anesthetist in providing trauma care and labor analgesia. **Conclusion:** Every paramedical staff should be made aware of the different roles played by the anesthetist apart from providing anesthesia to surgical patients. This will finally result in the better utilization of anesthesia services, better patient satisfaction, and better patient outcome.

**Keywords:** Paramedical Staff's Knowledge; Anesthesia; Anesthetist.

Since the time anesthesia has been demonstrated to the world, there has been immense development in the field of anesthesia and consequently, the role of anesthetist has extended beyond the traditional operating room into critical care, trauma center pain clinics, and conduct of painless deliveries. In the last 2-3 decades, there is the tremendous increase in the healthcare awareness all over the world but similar kind of awareness about anesthesia and anesthetist is lacking among patients as revealed by recent studies [1,2,3]. Our paramedical staff is not an exception [4,5]. Paramedical staff forms the backbone of any healthcare delivery system. It is impossible to run efficiently any health care facility without having well trained paramedical staff. They are involved in the care of the patient right from the OPD consultation, admission, preoperative

preparation, intraoperative care and postoperative care till patient discharge. They form the link between patient and doctor. They are the mainstay population who come into the front face. In case of health care need, any inpatient first contacts the staff nurse because they are easily approachable and it is convenient for the patient to explain his problem. Hence, the paramedical staff should be able to understand the patient's problem and should know whom to contact. They should also be able to understand and recognize any emergencies and complications and should inform the concerned specialist on the priority basis. Because the anesthetists are frequently involved in the care of medical and surgical emergencies, paramedical staff should have adequate knowledge about anesthesia and anesthetist so that they should understand

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when to call anesthetist. Hence, we have undertaken this study to assess paramedical staff's knowledge about anesthesia and anesthetist.

### Method

The present study is a prospective cross-sectional questionnaire-based study. After obtaining informed written consent, about 100 paramedical staff posted in different departments were selected

for the study. Those staff who are on leave and are not willing to participate were excluded from the study. All the participants were interviewed using the set of questionnaires administered face to face orally by an investigator and responses for each question were recorded. Questions are designed to capture a demographic profile of staff, qualification, work experience as well as to assess the knowledge of paramedical staff regarding anesthesia and anaesthesiologist. Data collected thus were subjected to simple statistical analysis.

**Table 1:** The questionnaire

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1. Age \_\_\_\_\_
  2. Gender \_\_\_\_\_
  3. Educational status \_\_\_\_\_
  4. Work experience \_\_\_\_\_
  5. Who will assess patient regarding fitness to undergo surgery? \_\_\_\_\_
  6. Why is fasting needed before surgery according to you? \_\_\_\_\_
  7. Is anaesthesia needed if surgery should be required? \_\_\_\_\_
  8. How is anaesthesia applied? \_\_\_\_\_
  9. Is anaesthesia applied to all patient in the same way? \_\_\_\_\_
  10. How many different types of anaesthesia you know? \_\_\_\_\_
  11. Have you heard about anaesthetist? \_\_\_\_\_
  12. Is anaesthetist, a specialist doctor or one who works under supervision of surgeon? \_\_\_\_\_
  13. What anaesthetist will do once the patient is anaesthetised? \_\_\_\_\_
  14. Do you know that anaesthetist are involved in your postoperative care? \_\_\_\_\_
  15. Do you know that anaesthetist are involved in the care of critically ill patients? \_\_\_\_\_
  16. Do you know that anaesthetist are involved in the care of accident and emergency patients? \_\_\_\_\_
  17. Do you know that anaesthetist are involved in the conduct of painless deliveries? \_\_\_\_\_
  18. Do you know that anaesthetist plays important role in the resuscitation of cardiac arrest patient? \_\_\_\_\_
  19. Do you know that if any patient in the hospital suddenly becomes serious, anaesthetist are immediately called? \_\_\_\_\_
  20. Do you know that anaesthetist runs pain clinic? \_\_\_\_\_
  21. Are you interested to know more about anaesthesia and anaesthetist? \_\_\_\_\_
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## Result

The analysis of the data collected from our study showed that the majority (82%) of participants were in the age group 17 to 25 years. A majority

(61%) of them were females and only 14% were graduate while rest 86% completed diploma nursing. Among 100 candidates, only 36% were having experience above 1 year while remaining candidates were beginners or are having less than 1-year experience.

**Table 2:** Demographic profile

Sl. No.	Patient Variables	Number	Percentage
1	Age		
	17-25 years	82	82%
	26-40 years	13	13%
	41-50 years	5	5%
2	Gender		
	Male	39	39%
	Female	61	61%
3	Education		
	Diploma	86	86%
	Graduate	14	14%
4	Work experience		
	New recruits	42	42%
	1-6 months	12	12%
	7-12 months	10	10%
	1-5 years	27	27%
	6-10 years	3	3%
	11-20 years	3	3%
21 and above	3	3%	

When the participants were asked about who will assess the fitness of patient to undergo surgery 56% replied anesthetist, while to a question regarding the need for fasting before surgery, 68% replied to prevent complications. 75% of participants knew that anesthetist is a specialist doctor. When asked about how is anesthesia applied, 70% of them knew that anesthesia is applied using face mask or injection into back or block of the upper limb. 40% participant knew that anesthetist are involved in the post-operative care. 25%, 10%, 0% and 0% of participants know that anesthetist has a role in ICU, trauma care, the conduct of painless labor and pain clinics respectively. Fortunately, 75% knew that anesthetist has a major role to play in the resuscitation of the collapsed patient. All most all of the participants expressed the desire to know more about anesthesia and anesthetist.

## Discussion

Paramedical staff is cornerstone of any health care system. They are the people who stay with the patients most of the times, listen to their queries and deliver the care. They are involved right from the entry of patient, OPD consultation, admission,

bedside care till patient discharge. They form the backbone of the health care system. Hence, it is mandatory for them to have knowledge about different specialties, different ailments, methods of patient assessment and consultation with respective specialist etc. This is useful especially if staff nurse knows about the role of anesthetist as they are the people who are involved in the emergency care of a patient. It may so happen that, after parenteral administration of a drug, staff nurse may witness that patient is collapsing. If the staff nurse knew that it is time to call anesthetist, who are available round the clock especially in the institutional setup, precious time can be saved before the emergency care is delivered. This ultimately results in the better outcome. It has been found from few studies that not all paramedical staff are aware of anesthesia and anesthetist. Bhattarai B, Kandel S, Adhikari N [4] in their study found that out of 120 paramedical staff who were interviewed, only 49.20 said it to be a different specialty and 72.5% said anaesthesiologist work differently in the theatre whereas 70% knew anaesthesiologist did something in the post-operative period too. In contrast to this, only 40% of participants in our study knows that anesthetists are involved in post-operative care.

Hiremath DA [5] conducted the survey on 105 participants and found that majority of 90.28% of respondents felt that anesthesia was necessary for surgery. 40.80% knew that it was given by anesthesiologists. 18.38% of respondents knew that besides anesthetizing, anesthesiologists monitor the vital signs till the completion of surgery. 5.60%, 9.11% & 3.8% of respondents were aware of their role in ICU, labor analgesia and pain clinic respectively. Only 22.81% patients had knowledge about anesthesia risks given in consent form. In contrast to the study by Hiremath DA, the higher number (25%) of participants in our study knows that anesthetist have the role in ICU whereas no participants of our study knew that anesthetist has the role in labor analgesia and pain clinic.

### Conclusion

Hence, we have come to a conclusion that, the awareness of paramedical staff regarding specialty of anesthesia and anesthetist needs to be enhanced using various methods like in-house training programs, use of pamphlets, internet etc so that patient can avail anesthesia related services effectively.

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