

Perception About the Role of Anesthesia and Anesthesiologist Among the Paramedical Staffs: Perspective from a Medical College in Nepal

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ABSTRACT

Background

Anesthesiologists and anesthesia has been considered behind the scene. The image and status of anesthesiologist in the eyes of the medical and lay communities has always been a problem.

Objectives

This study was designed to assess the knowledge about the role of anesthesiologist among the paramedical staffs at Kathmandu University Hospital.

Methods

This prospective questionnaire based study was done at Kathmandu University School of Medical Science, Dhulikhel Hospital for 2nd January 2011 to 30th Jan 2011 among the paramedical staffs working in different department of the hospital.

Results

There were 150 questionnaire distributed out of which 120 responded. Mean Age was 23.33 and most of the respondents were female with majority having education qualification equivalent to intermediate level. Only 49.20 said it to be a different specialty and 72.5% said anaesthesiologist work differently in the theatre where as 70% knew anaesthesiologist did something in the post-operative period too.

Conclusion

Anesthesiologists have duty to visit patient's pre operatively and post operatively. The role inside the theatre and expanding role outside the theatre is poorly known. The awareness about the role of anesthesiologist in operation theatre, in intensive care unit, acute and chronic pain management and emergency care areas should be highlighted to all the staffs.

KEY WORDS

Anaesthesia, paramedical

INTRODUCTION

Anesthesiologists and anesthesia has always been considered as behind the scene specialty. Even among the medical doctors in Nepal, it has not grown to a specialty that has been charming and demanding. So the image and status of anesthesiologist in the eyes of the medical and lay communities has always been a problem.¹ Anesthesiology is fastest growing branch of medicine that has made immense development last thirty years. Development of surgery parallels to advances in anesthesia and anesthetic techniques. Despite a great evolution in anesthesia, the network media doesn't emphasize the role of anesthetic team in the successful outcome of the surgery. Rather

it focuses on legal aspects surrounding the patient's perioperative complications and demise.² Although there is tremendous health care awareness, especially in developed countries, still they have hardly any knowledge of the structure of the medical services and practices specially relating to the operating room services and more over relating to anesthetic management.³ The paramedical staffs are the mainstay population who come into the front face. One study has shown even healthcare personnel and academic staffs don't know the current depth of anesthetic practice and the teaching potential of the anesthesiologist.⁴ The widespread role of anesthesiologist

in short term care, as well as in pain relief, is not known to the public, and they have very limited knowledge about the speciality.⁵ In developing countries like ours where the registered number of anesthesiologist are less than 120, Nurses and paramedical staffs are the cornerstone of the communication and information means to the patients. Patients with higher anxiety level and undergoing surgery for the first needed more preoperative information.⁶ Mostly information is given by nurses and paramedical staffs, which further translates basically as information to patients, their understanding to the discipline and work remains vital. This study was designed to assess the knowledge about the role of anesthesiologist among the paramedical staffs at Kathmandu University Hospital.

METHODS

This prospective questionnaire based study was undertaken after obtaining approval from the hospital ethical committee from 2nd January 2011 to 30th Jan 2011. The study was conducted among the paramedical staffs of Kathmandu University Hospital. This institution has 350 bedded teaching hospitals with intake of sixty medical students every year. There are four five functional operation theaters, three minor surgery theatres with four full time anesthesiologist, three anesthesia assistants and six anesthesia nurses. This center performs around five thousand surgeries per year.

This study was structured questionnaire based study where the questionnaire was provided to all the staffs and they were asked to fill it and submit it to their respective chief who then submitted it to one of the authors.

All the paramedical staffs working in different department of hospital were included in the study. However, we excluded those who denied, working inside the operation theatre and staffs on leave during the study period.

The data collected then entered into the computer and was analyzed using Statistical Program for social Sciences V 17.0.

RESULTS

We distributed 150 questionnaires and received 120 questionnaires with answers. We tried correlating the data with different factors like place of work, education qualification.

Demographic profile:

The mean age of the respondents was 23.33 and majority of them were females (80.80%). (Table 1)

We classified the respondents based on the departmental distribution. (fig 1)

Maximum number of respondents belonged to other department that included Physiotherapy, ENT, Ophthalmology, Dermatology outpatient department. Surgery and Orthopedics and Gynecology and Obstetrics

Table 1. Demographic profile of the respondents

Age(Mean±SD)	Sex M:F
23.33±4.298	23:97 (19.20%:80.80%)

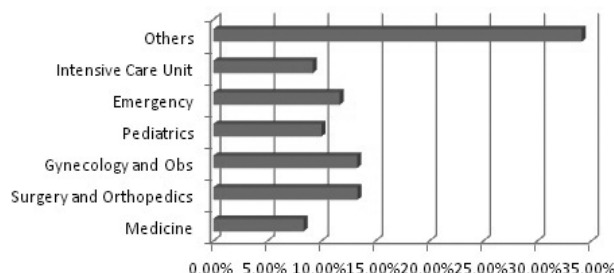


Figure 1. Departmental distribution of participants

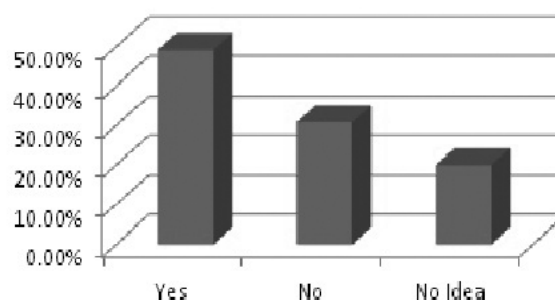


Figure 2. Showing perception if anesthesiology was separate discipline.

were followers with 13.35% and 13.30 respectively.

Most of our respondents were had passed intermediate nursing (+2) equivalent (85.80%) where as 7.5% had finished their bachelors, 4.2% were midwives and only 2.5% had finished master’s degree.

Perception about the anesthesiologist as doctor and his role

Role of anesthesiologists:

It was very disheartening to know that 49.20% of respondents knew anesthesia was a different specialty and 60% out of them knew that anesthesiologists had definitive role in the theater, 35.85 percent responded we were skilled assistant to surgeon and rest had no idea what we do where as 30.80% thought it was not a different specialty.

Work of anesthesiologist in OT

72.5% of respondents who knew anesthesiologists have definitive role in the theatre, still they thought the role was limited to administering drugs and monitoring patients intraoperatively, whereas 27.5% had added information about the role of anesthesiologist in the post-operative period.

Role of anesthesiologist in post-operative period

Out of the respondents who thought we had definitive role, 70.85% had knowledge that we so something for the immediate post-operative complication, 23.35% though we would manage pain and 3.3 % did not know anything about it and 2.5% thought we only monitor the patients.

Who manages post-operative complications?

76.7% of the respondent answered it was concerned surgeon, 17.5% said it was other physician and 5.8% did not know.

Knowledge regarding different kinds of anesthesia techniques

Most of our respondents (56.7%) knew that Anesthesia techniques consisted of General and Regional anesthesia, 24.2% knew only about general anesthesia, 5.8% knew about regional anesthesia where as 13.3% had no idea what the techniques were.

Knowledge of complications of General Anaesthesia

Out of the respondents who knew the anesthesia techniques, we asked the respondents if they knew about the complications of General Anesthesia; 85.8% had knowledge of complication of GA.

Knowledge of technique of Regional Anaesthesia

We also asked the respondents if they knew about regional anesthesia 77.50 knew about it; however 22.50 were unaware of it.

Knowledge about different technique of Regional Anaesthesia

Among the respondents who knew about regional anesthesia, we gave option to the participants asking if they knew different techniques of regional anesthesia; 2.5% had knowledge of spinal only, none had knowledge of epidural only, 77.5% has knowledge of spinal + epidural and 20% had no idea.

Knowledge about complication of Regional Anaesthesia

Among those who knew what Regional anesthesia was, 73.3% also knew the complications and 26.7% had no idea about the complications.

DISCUSSION

The present role of anesthesiologist is more of a "perioperative physician". The modern day medical facilities require the expertise of anesthesiologists than any other specialist doctor.

The general public health awareness is not matched with similar awareness or perception of the special skills of anesthesiologist or anesthesia procedures.⁷ Advances in anesthesia have led to advances in the surgical specialty. Better awareness of anesthesia activities and proper expectation by the patient would make it a public demand would create interest of health administrators and help in recruiting more anesthesia related health facilities to consumers.⁸⁻¹¹ Our data was based on the questionnaire which revealed limited knowledge about the anesthesia and anesthesiology as a specialty, even some of the hospital staffs thinking it not to be specialty

of its own (30.8%). Although most of the paramedical staffs and nurses have their posting at least for few days in operating room during their study period, this had not helped much for understanding the duties and responsibilities of anesthesiologist in teaching hospital. Lack of recognition and decreased appreciation of the role of the anesthesiologist contributes to the frustration of the anesthetic practitioner.¹² A review article that summarized published data, reported in 65 to 78% of patients in British hospital thought that their anesthesiologist was a doctor.^{8,9,11} A surgical patients when gets admitted in the hospital gets in contact at first with the paramedical staffs. So lack of knowledge of anesthesia as a specialty may be transmitted in a form or other to the patient.

In our study the level of education correlated with the knowledge about the anesthesia and anesthesiologist. This can be correlated with other studies where patients with better academic qualification were found to have better knowledge about anesthesia and specialty.¹³

As mentioned in one of the study, anesthesiologist have less contact with the conscious patient than other medical profession they are well perceived by the paramedical staffs at the hospital during the preoperative visit, post-operative rounds and ICU discussions.¹⁰

The lack of recognition can affect anesthesiologist' self-esteem, especially given the amount of effort required to achieve the expertise.¹⁴ There should be means to disseminate the information regarding the widespread role of anesthesiologist inside and outside the operating rooms and in area such as emergency medicine pain relief and cardiopulmonary resuscitation.⁸ This knowledge impacts medical school curriculum development and teaching. Poor public image is one of the reasons for job dissatisfaction among the anesthesia residents.¹⁵ This is very true in developing country like ours where there is constant shortage of anesthesiologist with total number ranging less than 120 and students hesitate to join anesthesiology programme. The present study reiterates poor knowledge of the paramedical staffs regarding the role of anesthesiologist and highlights the need for exposure of the specialty to all concerned. As the paramedical staffs stay as the front line of communication in country like ours, improving the image of the specialty will surely help towards improving its image to the eyes of the public. We had included the staffs from ICU that may have caused bias in the study. It was desirable to consider the duration of work in the hospital. We did not ask if any of the staffs in the hospital had undergone previous surgery. We had not asked about the previous work exposure if they had actually worked in the operation theatre.

CONCLUSION

Anesthesiologists have duty to visit patient's pre operatively and post operatively. During this period in the wards they come across various paramedical staffs. The role inside the

theatre and expanding role outside the theatre is poorly known. The awareness about the role of anesthesiologist in operation theatre, in intensive care unit, acute and chronic pain management and emergency care areas should be highlighted. The requirement of anesthesiologist starts right at the corridor of the hospital i.e., the emergency room where the skills exercised by the anesthesiologist can bring in a world of difference in the ultimate outcome of the patient's condition, when each and every minute is precious. Presently the subspecialty of Emergency Medicine is getting groomed with the association of the Anesthesiologists and most institutions already have a

full-fledged Emergency Medicine Department including anesthesiologists. Providing knowledge about expertise of anesthesiologist among paramedical staffs and incorporating few chapters regarding anesthesia in the curriculum would be highly desirable.

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