

AWARENESS ABOUT ANESTHESIA AND ANESTHESIOLOGIST AMONG THE PARAMEDICAL STAFFS OF SN MEDICAL COLLEGE, BAGALKOT (KARNATAKA)

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ABSTRACT: BACKGROUND: The more advancing and life saving specialty and specialist i.e., anesthesia and anesthesiologists, both have been kept behind the screen, more so in developing countries. Though the role of anesthesiologist is crucial, the public knowledge of anesthetic practice is limited. The present day anesthesiologist is based on the use of newer and safer drugs, better patient monitoring, pain management, labour analgesia and critical care. **OBJECTIVES:** This study was designed to assess the knowledge about the role of anesthesia and anesthesiologist among the paramedical staff at S.N medical college, Bagalkot. **METHODOLOGY:** This prospective questionnaire based study was done at S.N medical college and hospital among paramedical staffs working in different departments after taking the consent and approval of the ethical committee. Data was collected by pretested and predesigned questionnaire from 105 study participants. A 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 anaesthetizing, 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. The statistical association between past exposure to anesthesia and knowledge about anesthesia was not significant ($p < 0.1$). **CONCLUSION:** Anesthesiologist work mainly in the operation theatre and to some extent monitor the patient in the post operative ward for pain management and nausea vomiting, headache, etc. The role inside the theater & expanding role outside the theater poorly known. The awareness about the role of anesthesiologist in operation theater intensive care unit labor analgesia acute and chronic pain management and emergency care areas and disaster management areas should be highlighted to all the paramedical staff.

KEY WORDS: Awareness, anesthesia, anesthesiologist, paramedical staff.

INTRODUCTION: Anesthesia and Anesthesiologist have been viewed always as behind the screen specialty. In the past 10 years this specialty is growing leaps and bounds, cutting across of four walls of Operation Theater. Their role in pain clinic, labor analgesia, intensive care units (ICU) is significantly appreciated and they are the chief consultants and administrators of these sub-specialties of Anesthesiology. Recently medical council of India has introduced MD in emergency medicine with Anesthesiologist as a head of Dept of emergency medicine.

In spite of a great evolution in anesthesia, the network media does not emphasize the role of anesthesia team in the successfully outcome of surgery. The media highlighted on the legal aspects surrounding the patient's preoperative complications and death¹. Hence the image and status of anesthesiologist is compromised.

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In the eyes of medical and lay communities has always been a problem² the paramedical staffs are the mainstay population who come into the front face. The widespread role of anesthesiologist in intensive care, as well as in pain clinics is not known to the public and they have very limited knowledge about the specialty^{3, 4}. Nurses and paramedical staffs are the cornerstone of the communication and information to the patients and public. Patients with higher anxiety level and undergoing surgery for the first time they needed more pre-operative Information⁵⁻⁷. Hence this study was made to assess the knowledge of the specialty and specialist among the paramedical staffs of S N Medical College Bagalkot, Karnataka.

MATERIAL AND METHODS: This prospective Cross sectional study was focused on studying the awareness among paramedical staff working in different departments. However we excluded the staff working in the operation theatre, Staff on leave and Staff who denied to participate in the study. Total no of study participants were 105. Information was collected by using structured questionnaire regarding 1) anesthesiology as a separate medical discipline 2) Anesthesiologist as a medical doctor 3) Patient s Concerns about anesthesia 4) Different techniques of anesthesia 5) Demographic Profile of paramedical Staff. Scores were developed. The questions were having the options of 'YES', 'No' and 'Do not know'. The codes given were Yes=1, No=2 and Do not know=3. The options 'No' and 'Do not know' were considered as wrong answers or poor knowledge regarding the same. The scores obtained by the individuals were converted into three groups. Hence the low scores were considered as having good knowledge and high scores were considered as having poor knowledge. Data collected was entered in Excel sheet and analyzed by SPSS Version 16.0. Percentages & proportions were calculated to represent the data. Chi. Square test for association was done Yate's correction was done where ever appropriate.

RESULTS: Of the 105 paramedical workers 85 were males and 20 were females. Patients were divided on the basis of educational levels. 72.38% were diploma holders and 1.9% were BSc Nursing, 0.95% were Post BSc Nursing, 22.86% DMLT and 1.9% Post BSc MLT.

The Knowledge regarding Anesthesiology was assessed by giving following Scores, ≤ 5 Good, 6-8 Satisfactory and ≥ 9 poor as shown in Table 1.

All the Post BSc Nursing students (100%) were having good knowledge about Anesthesia and scoring was poor among DMLT Participants the association between educational status of participants and the knowledge regarding anesthesia is statistically highly significant.

(Chi Square value 25.112, degree of freedom 8, level of significance. 0.001) As shown in table 1.

The Scoring was done to assess the role of anesthesiologist in other areas like intensive care, trauma care, labour analgesia, post operative care, resuscitation care areas.

Scoring ≤ 6 good, 7-12 satisfactory and 13 poor. Knowledge regarding working as anesthesiologist in other areas apart from operation theatre was good among Post BSc Nursing Participants (100%) and BSc Nursing respondents (50%) and diploma Nursing respondents (25%) and very poor among DMLT Participants.

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The association between educational status and knowledge regarding anesthesiologists working in areas other than theatre is statistically significant (Chi Square value 24.814, degree of freedom 8 and level of significance 0.002). As shown in table.2.

32% of respondents know Nausea, vomiting. 18.1% knew that loss of consciousness in the post operative period, 7.7% knew pain and 14.28% did not know anything about post operative complications.

92.38% respondents knew that, patient should be kept nil orally before surgery.

DISCUSSION: Even though anesthesiologist plays a vital role of pre - operative physician, it is undersigned 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 consumers⁸⁻¹¹. In our study although anesthesia was considered necessary for surgery by majority of respondents i.e. 58% A greater percentage of them did not know about the person who would give anesthesia to them.

In our study 90.28% respondents knew that anesthesiology is an independent specialty and anesthesia was needed for surgery.

A Review article that summarized published data, reported in 65 to 78% of patients in British hospital thought that their anesthesiologist was a doctor ^{9,10, 11} A surgical patient when gets admitted in hospital gets in contact at first with the paramedical staff. So lack of knowledge of anesthesia as a specialty may be transmitted in a form or other to the patient.

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

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 staff at the hospital during the pre operative visit postoperative round and ICU discussions⁹.

The role of anesthesiologist outside the OT i.e. ICU labor analgesia and pain clinics were not known to the majority of patients as substantiated by our and other studies¹¹

In our study only 36.76% of populations were aware of information given in the consent form. Even more disappointing was the fact that only 15.33% of the participants had knowledge about anesthesia risks given in the consent form.

Source of information given by the respondents help us to know the cause of patients belief's, information's and ignorance regarding anesthesia and anesthesiologists. Most of the participants knew before hand their friends, media and 'their doctor' contributed to the knowledge of remaining participants. The contribution of an anesthesiologist in providing information was the least. This is because anesthesiologists get limited time during pre-anesthetic examination to provide information regarding the specialty and explain the advantages and disadvantages of the anesthetic procedures¹².

In western studies¹³ the major pre-operative concern was awareness during anesthesia and failure to gain consciousness followed by intra and post-operative pain. In Asian studies^{7,12} including

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ours the major pre-operative concern was intra and post-operative pain followed by failure to wake up after surgery and aware of being operated.

In our study 72% of the participants were aware of post-operative pain, nausea and vomiting. The complaint of post-operative pain was much more than the Netherlands study¹⁴. This could be because of the fact that the anesthetic has little role in post operative analgesia.

In our study the correlation between respondent's knowledge about anesthesia and increase in educational level was statistically significant ($p < 0.001$). This was in contrast to the finding of Gurunath et al¹².

The correlation between patients knowledge about anesthesia and previous exposure to the anesthesia was found to be statistically non significant¹⁵ ($P > 0.1$). This was in contrast to the Jumuna B et al.⁵ where past exposure contributed to the increased knowledge about anesthesia.

CONCLUSION: Anesthetists have duty to visit patient's pre and post operatively. Usually the Para-medical staff will assist during these visits. So, he should spend sufficient time with the patients and paramedical staff explaining the risks involved in each type of anesthesia and explaining the content of the consent form. Presently the subspecialty of the emergency medicine is getting groomed with the association of the anesthesiologists. Providing knowledge about expertise of anesthesiologist among para-medical staffs and incorporating few chapters in the curriculum would be highly desirable. Every year on October 16th, the 'WORLD ANAESTHESIA DAY' is celebrated in medical colleges all over the world and paramedical staff should be invited for the celebration. The public 'jatha' and street play shall be arranged to spread the awareness about anaesthesia and anesthesiologist. The guest lectures by eminent anesthesiologists shall be arranged in IMA [Indian medical association] meetings, in television shows etc.

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			Score for knowledge about anaesthesia			Total	
			Good	Satisfactory	poor		
education	Diploma	Count	56	18	1	75	
		% within education	74.7%	24.0%	1.3%	100.0%	
	Bsc nursing	Count	1	1	0	2	
		% within education	50.0%	50.0%	.0%	100.0%	
	post BSc nursing	Count	1	0	0	1	
		% within education	100.0%	.0%	.0%	100.0%	
	DMLT	Count	7	13	4	24	
		% within education	29.2%	54.2%	16.7%	100.0%	
	Bsc MLT	Count	0	2	0	2	
		% within education	.0%	100.0%	.0%	100.0%	
	Total		Count	65	34	5	104
			% within education	62.5%	32.7%	4.8%	100.0%

TABLE 1: The relationship between education of participants and knowledge regarding anaesthesia

<=5=Good, 6-8=Satisfactory, >9=Poor

Chi. Square value: 25.112 P-value: 0.001. df: 8

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			Score for knowledge regarding role of anaesthetist in other areas			Total	
			Good	Satisfactory	Poor		
education	Diploma	Count	15	58	2	75	
		% within education	20.0%	77.3%	2.7%	100.0%	
	Bsc nursing	Count	1	1	0	2	
		% within education	50.0%	50.0%	.0%	100.0%	
	post BSc nursing	Count	1	0	0	1	
		% within education	100.0%	.0%	.0%	100.0%	
	DMLT	Count	1	16	7	24	
		% within education	4.2%	66.7%	29.2%	100.0%	
	Bsc MLT	Count	0	2	0	2	
		% within education	.0%	100.0%	.0%	100.0%	
	Total		Count	18	77	9	104
			% within education	17.3%	74.0%	8.7%	100.0%

TABLE 2: The relationship between participants and knowledge regarding anaesthesia in other areas.

<= 6=Good, 7 - 12=Satisfactory, 13=Poor

Chi. Square value: 24.814 P- value: 0.002 df: 8

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