

Knowledge About Anesthesia Among Patients and Attendants Visiting Pokhara Academy of Health Sciences, Western Regional Hospital for Pre-Anesthesia Checkup.

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Article received: 3rd June, 2021

Article accepted: 27th Dec, 2021

ABSTRACT

Background:- Anesthesiologist plays a major role in operation theatre, intensive care unit, resuscitation and pain management. Though many patients are unaware of importance regarding anesthesiologist and anesthesia pre and intraoperative period. This present study was conducted to know the knowledge of patients regarding anesthesia and anesthesiologist.

Materials and Methods:- The present study was a cross sectional study which conducted using the predesigned questionnaire to assess the Knowledge about anesthesiologist and anesthesia in patients and attendants attending for Preanesthetic checkup at outpatient clinic (PAC- OPD) of Pokhara Academy of Health Sciences after taking voluntary informed consent.

Result:- Of 76 participants, only 59.2% were aware that an anesthesiologist is a doctor. About 43.4% of participants said that pre anesthesia checkup is necessary if surgery is to be performed under anesthesia 2.6% of participants said it is not necessary whereas 53.9% doesn't have an idea regarding this. 62% participants know smoking or alcohol intake habit increase the risk of anesthesia. And 56.6% participants said hypertension, diabetes, thyroid disorders, bronchial asthma increase the risk of anesthesia. About 52.6% of our participants had good knowledge (score of ≥ 5)

Conclusion:- This study concludes that patients have inadequate knowledge regarding the importance of Pre-Anesthesia checkup, anesthesiologist role during surgery. Hence it is important to know anesthesiologists besides the surgeon should have a critical role in treatment of patients. pre anesthesia checkup before the surgery would certainly help to reduce knowledge regarding the importance of anesthesia and anesthesiologist's role during surgery and post op period.

Keywords:- Anesthesia, Knowledge, Pre-Anesthesia Check up

INTRODUCTION

Majority of patients who come for pre-anesthesia checkup have very limited knowledge regarding anesthesiologist and anesthesia.¹ Most of the patients consider anesthesiologists as an assistant to surgeon, who puts them to sleep before surgery and wakes them up when surgery is over.² Very few patients know that anesthesiologists are the ones who diagnose and treat the medical problem that may arise before, during and after surgery.³ Awareness regarding anesthesiology and the vital role played by anesthesiologists in patient's medical care and in regulating critical life functions during the perioperative period is limited.

Before any surgery, pre-anesthesia checkup is an important aspect for patient care.⁴ Most of the patients consider it to be a waste of time and money and try to rush through the pre-anesthesia checkup resulting in incomplete history and general physical examination. This increases the risk of morbidity and mortality during perioperative period.⁵

Patients have limited knowledge regarding Pre-anesthetic assessment and its benefits for surgery.⁶ It provides an opportunity for the patient to discuss any queries or fears regarding anesthesia. Hence, efforts should be made by not only anesthesiologists but also by surgeons involved in patient care to emphasize the importance of Pre-anesthesia checkup (PAC) clinics to reduce perioperative morbidity and mortality.⁶ Anesthesiologists are the one who first diagnose and treat medical problems and complications that may arise before, during, and after surgery. Even though the anesthesiologists play a vital role in a patient's medical care and in regulating critical life functions, awareness regarding their efforts goes unrecognized^{7,8}. It is important for us to make people aware about the role played by an anesthesiologist in perioperative care of patients.⁷ So, It is important to know the knowledge of patients towards anesthesiologists and anesthesia.

This present study was conducted with the aim to assess knowledge regarding anesthesiologist and anesthesiology among patients and

attendants attending PAC- clinic of Pokhara Academy of Health Sciences, Western Regional Hospital, Pokhara.

MATERIAL AND METHODS

This Cross-sectional study was conducted at the outpatient clinic of Department of Anesthesiology of PAHS from June 2020 to September 2020. Census Survey method was used to collect the data. Patients and their attendants who gave verbal consent during PAC were enrolled in the study. Patients who denied consent and below 19 years were excluded from the study. A total of 76 participants were enrolled in this study. The study proposal was approved by the Institutional review committee of PAHS (IRC NO 6. 2077/078).

Participants were interviewed in the local Nepali language by first author using a structured questionnaire. Pre-tested questionnaire used by Singhla T et al in similar study was modified to interview the participants⁹. It consisted of two parts. First part included questions from 1-4; which were related to general socio-demographic information and part two included questions from 5-14; which assessed patient's knowledge regarding pre-anesthesia checkup. Each question was provided with multiple possible choices, out of which the patient had to choose the most appropriate answer. Scoring system was used for questions from 5-14. Each correct answer carried '1' mark, while incorrect answer and 'don't know' answer was awarded '0' mark. The level of knowledge was dichotomized into "good" and "poor" based on the scoring system. A score of ≥ 5 was labelled good knowledge and < 5 was labelled poor knowledge.

All the questionnaires were checked for completeness and data was entered in MS Excel 2010. It was analyzed by using SPSS 20.0 Version. The Descriptive statistics data were expressed in percentages and proportions. Relationship between age, sex and education was correlated with knowledge of anesthesia and anesthesiologists.

RESULTS

A total of 76 patients aged above 19 years coming to the pre anesthesia clinic answered the questionnaire. 43.4% of the patients were 19 to 40 years of age while 54.6% were 40 above. 38 (50%) were males, 37(48.7%) were females and remaining 1(1.3%) were Transgender (Table 1). Association of age and gender was not found significant with perception of anesthesia and anesthesiologists (Table2). As far as literacy levels were concerned 14.5% of the patients were illiterates, 31.6% had studied up to primary school, 14.5% finished secondary school, 22.3% were upper secondary school and remaining 17.1% were graduates. 44.7 % of the patients had history of previous surgical intervention, 55.2% visited the clinic for the 1st time. Positive correlation was found between the level of education of the participants with knowledge regarding pre-anesthetic check up, anesthesia technique and anesthesiologist (Table3).

DISCUSSION

Pre-anesthesia checkup is a medical check-up and laboratory investigations done by an anesthesiologist or a registered nurse before an operation to assess the patient's physical condition and any other medical problems or diseases. A mnemonic has been suggested for pre-anesthetic assessment, to ensure that all aspects are covered.⁸ The knowledge regarding anesthesiologist and anesthesia among the general public are very limited.⁹ According to our study, 43.5% of the patients are aware of pre-anesthesia checkup. Study performed by Singla et al found that only 27.4% of patients were aware of pre-anesthesia assessment, the rest were not clear.⁹ We found that different parameter like importance of peri-anesthesia checkup necessity, the role of anaestheslogist in OT and post-operative care were not significantly associated with education of the patients. But the educated patients are concerned about anaestheslogist and anesthesia techniques

In our context, patients are only focused on surgery rather than anesthesia. It is still believed that anesthesia during surgery is also given by

an operating surgeon. Study revealed that 58.6% of the patients share such feelings with the surgeon in ward.⁶ About 40.8% of the patients were unaware about anesthesiologist as a doctor and 39.5% of patients even don't know the role of anesthesiologist in OT whereas 26.3% participantssaidthatanesthesiologistsadminister drugs and monitor patients throughout operation and post-operative periods. In developing countries, only 50- 60 % patients know that anesthesiologists are also doctors.¹⁰ We found 47.3% of patients had poor knowledge about anesthesiologists. Similar finding observed in the study by saugan et al. It is a vital role of anesthetist in operation theatre which should be aware by patient.¹¹ In the study performed by Singh T et al, 58.8% participants mentioned that anesthesiologists administer drugs and monitor patients throughout operation, and only 23.6% revealed anesthesiologist managed the patient in the postoperative period.¹²

Better anesthesia awareness among patients will aid in the provision of more anesthesia-related health services to patients.⁷, Anesthesiology knowledge was lacking in our study as compared to other studies.⁵ This could be due to a lack of health-related education and 22.2% of the participants were illiterate.

When we specifically asked about the different types of anesthesia ,77.6% had no idea about these techniques, considering that 9.2% patients answered they know about spinal anesthesia, while 6.6% answered about general anesthesia. Study carried out by George M et al¹³ found that 57% knew about both techniques of anesthesia which is higher than our study. Our study had certain limitation, patient and their attendant had poor knowledge regarding paranesthesiaassessment and its importance. Other was impact of such poor knowledge in society and general public. So, it needs to increase the knowledge among general public about anesthesia with larger sample size study in future.

CONCLUSION

This study concludes that patients have inadequate knowledge regarding the importance

of Pre-anesthesia checkup, anesthetist role during surgery. Hence, it is important to know anesthesiologists besides the surgeon should have a critical role in treatment of patients. pre anesthesia checkup before the surgery would certainly help to reduce knowledge regarding the importance of anesthesia and anesthetist's role during surgery and post-operative period.

Acknowledgement: None

Conflict of Interest: None

Table.1 Socio demographics information

Variables	Parameter	PercentageN=(76)
Gender	Male	38(50%)
	Female	37(48.7%)
	Transgender	1(1.3%)
Age	19 to 40 years	33(43.4%)
	>40 years	43(56.6%)
Education	Illiterate	11(14.5%)
	Primary school	24(31.6%)
	Secondary school	11(14.5%)
	Upper Secondary	17(22.3%)
	Graduate	13(17.1)
Previous History of Surgery?	Yes	34(44.7%)
	No	42(55.2%)

Table.2. Association shown by Pearson chi square(X²) between age, gender and knowledge of anesthesia

Independent Variables	Parameter	Dependent variable	Chi-Square value (X ²)	df	p
		Total score			
Gender	Male (38)	20(52.6%) vs 18(47.3%)	0.236	1	0.645
	Female (37)	(19)51.3%vs 18(48.6%)			
	Trans gender (1)	1(2.5%) vs 0			

Age in years	19-40 (33)	17(51.5%) vs 16(48.5%)	0.84	2	0.669
	>40 (43)	23(53.5%) vs20(46.6%)			

Table.3 Association shown by Pearson chi square(X²) between education and knowledge of anesthesia

Variables	Parameter N(76)	Education	Chi-Square Value (X ²)	df	P-value
Is pre-anesthesia checkup necessary only if surgery is to be performed under anesthesia	Yes 33(43.4%)	Illiterate 11(14.5%) Primary school 24(31.6%)	17.53	10	0.063
	No 2(2.6%)				
	Don't Know 41(53.9%)				
What is the importance of pre-anesthesia checkup before surgery?	Reduce the risk of anesthesia before surgery 26(34.2%)	Secondary School 11(14.5%) Upper Secondary 17(22.3%) Graduate 13(17.1%)	29.036	16	0.016
	To get date for operation 24(31.6%)				
	Legal Documentation 1 (1.3%)				
	Don't know 25(32.9%)				
Is anesthesia checkup necessary before surgery?	Yes 43(56.6%)	Secondary School 11(14.5%) Upper Secondary 17(22.3%)	15	10	0.132
	No 7(9.2%)				
	Don't Know 26(34.2%)				
Is an anesthesiologist a doctor?	Yes 45(59.2)	Graduate 13(17.1%)	12.178	10	0.273
	No 6(7.9%)				
	Don't know 25(32.9%)				
Who is performing PAC?	Nurse 1(1.3%)	Secondary School 11(14.5%) Upper Secondary 17(22.3%)	14.084	5	0.015
	General doctor 46(60.5%)				
	Anesthesiologist 29(38.2%)				
What is the role of an anesthesiologist in OT?	Administer the drugs 15(19.8%)	Illiterate 11(14.5%) Primary school 24(31.6%)	11.44	15	0.720
	Administer drug and monitor patient during operation 11(14.5%)				
	Administer drug and monitor patient during operation and postoperative period 20(26.3%)				
	Don't know 30(39.5%)				
What are the different anesthesia techniques (Multiple's response)	Spinal 7(9.2%)	Secondary School 11(14.5%) Upper Secondary 17(22.3%)	32.5	15	0.05
	General 5(6.6%)				
	Don't know 59(77.6%)				
Does smoking or alcohol intake habit increase the risk of anesthesia?	Both 5(6.5%)	Graduate 13(17.1%)	8.885	10	0.543
	Yes 47(62%)				
	No 8(10.5%)				
	Don't Know 21(27.6%)				
	No 33(43.4%)				

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