



AWARENESS OF PATIENTS REGARDING ANESTHESIA; ATTITUDE TOWARDS BASIC TYPES OF ANESTHESIA TECHNIQUES

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INTRODUCTION

Because of lack of public awareness about anesthesia as a medical discipline, many patients do not recognize the role played by anesthetist in preoperative, perioperative and postoperative period. Many studies has been conducted, which

ABSTRACT... Awareness of patients regarding anesthesia & their attitude towards basic types of anesthesia techniques. **Objective:** The purpose of this study was to assess the knowledge of patients regarding anesthesia, their attitudes towards basic types of anesthesia techniques and effect of previous experience of anesthesia on the awareness. **Study design:** Descriptive observational study. **Place and duration of study:** This descriptive, prospective study was conducted in the Isra university hospital Hyderabad, Sindh, Pakistan from 2nd August 2013 upto 8th March 2014. **Patients and Methods:** Two hundred thirty one patients were included in the study after taking verbal informed consent. All patients who were scheduled for elective surgery were interviewed while patients who had refused from participation, have language barrier, psychiatric disease, had lack of sufficient mental capacity due to poor health status and patients undergoing emergency surgeries were excluded from the study. Patients were interviewed in their local language upon arrival in the preoperative area of operation theatre. Self made questionnaire was filled. All the data was entered on SPSS version 16. Frequency and percentages were calculated to show the results. Mean with SD of patients age was computed. Chi-square test was applied to assess the affect of previous experience of surgery on patient's knowledge regarding anesthesia. P value less than 0.05 was taken as significant. **Results:** Total 231 patients were included in the study. Mean age of the patients was $36 \pm SD 1.01$. Fifty one (22.1%) patients were illiterate; while 54 (23.4%) patients were graduate. 103(44.6%) patients had previous experience of surgery/ anesthesia while 128(55.4%) patients had no experience. Out of 231 patients, 111 (48.1%) patients were aware of different type of anesthesia techniques while 120(51.9%) patients were not aware. Out of 103 patients, who had previous exposure of anesthesia, 64 patients answered correctly about different types of anesthesia techniques while 81 patients who had no previous exposure of anesthesia, answered incorrectly (P value = 0.000). Fifty three patients who had previous exposure of anesthesia answered correctly that anesthetist is a qualified doctor, while 62 patients answered incorrectly who had no previous exposure (P value=0.546). Out of 231 patients, 91 (39.39%) patients were in favor of having general anesthesia while 52(22.51%) patients were in favor of regional anesthesia, while 88(38.0%) had left the choice on surgeon. **Conclusions:** Results of the study show poor knowledge of patients regarding anesthesia and anesthesiologists. Majority of the patients were in favor of having general anesthesia rather regional anesthesia. There is need to correct the misconceptions of patients and to educate the public.

Key words: Anesthesiologist, general anesthesia, regional anesthesia, awareness.

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shows the poor public knowledge regarding anesthesia in developing^{1,2} and developed countries^{3,4}. In a survey conducted in British hospital, only 65% patients thought that anesthesiologist is doctor³. Same results are seen in study conducted at Hongkong⁵.

Anesthesiologist plays important role in intensive care units, trauma centres, pain clinics and as a member of resuscitation team all over the world³. A good anesthetist patient relationship is important to reduce the anxiety of patient⁶. This can be achieved by giving reliable information regarding intended surgery and anesthesia. Regional anesthesia is considered a safe technique worldwide. The choice of anesthesia techniques can differ between countries and culture which could be the reason of low demand of regional anesthesia in developing countries^{7,8}. In our country unfortunately many patients refuses for regional anesthesia due to lack of knowledge and false beliefs⁹.

This study was conducted to assess the knowledge of patients regarding anesthesia, their attitudes towards different options of anesthesia techniques and factors affecting the awareness.

MATERIAL AND METHODS

This descriptive, prospective study was conducted in the Isra university hospital Hyderabad, Sindh, Pakistan from 2nd August 2013 upto 8th March 2014. Two hundred thirty one patients were included in the study after taking verbal informed consent. All patients who were scheduled for elective surgery from surgery, urology and gynae department were interviewed while patients who had refused from participation, have language barrier, psychiatric disease, had lack of sufficient mental capacity due to poor health status and patients undergoing emergency surgeries were excluded from the study.

Patients were interviewed in their local language upon arrival in the preoperative area of operation theatre. Self made questionnaire was filled which included demographic data, their knowledge regarding anesthesia, their choices about anesthesia techniques, and reasons of preferring or refusal of specific anesthesia.

All the data was entered on SPSS version 16. Frequency and percentages were calculated to show the results. Mean with SD of patients' age was also computed. Chi square test was applied to

assess the affect of previous experience of surgery on patient's knowledge regarding anesthesia. P value less than 0.05 was taken as significant.

RESULTS

Total 231 patients were included in the study. Mean age of the patients was 36 ± SD 1.01. Fifty one (22.1%) patients were illiterate, while 54 (23.4%) patients were graduate. 77(33.3%) patients belonged to poor class while 63(27.3%) were from upper class. 103(44.6%) patients had previous experience of surgery/ anesthesia while 128(55.4%) patients had no experience (Table I).

Variables	Numbers	%ages
Socioeconomic condition		
Poor	77	33.3
Middle	91	39.4
Upper	63	27.3
Education		
Illiterate	51	22.1
Primary	56	24.2
Middle	70	30.3
Graduate	54	23.4
Previous experience of surgery		
Yes	103	44.6
No	128	55.4

Table-I. Demographic data

Table-II shows awareness of patients regarding anesthesia. Out of 231 patients, 111 (48.1%) patients were aware of different type of anesthesia techniques while 120(51.9%) patients were not aware. 119(5.5%) patients knew that anesthetist is a qualified doctor while rest, don't knew (Table II).

Only 64(27.7%) patients correctly answered the role of anesthetist after surgery while 167(72.3%) answered incorrect. Only 66 (28.6%) patients want to meet the anesthetist prior to surgery while 165(71.4%) patients don't want to meet their anesthetist and out of 231, 72(31.2%) patients wanted to have anesthetist of their own choice,

Variables	Correct answer No: (%)	Incorrect answer No: (%)
What are different types of anesthesia	111(48.1%)	120(51.9%)
Who will give you anesthesia	109(47.2%)	122(52.8%)
By which route general anesthesia is given	75(32.5%)	156(67.5%)
By which route spinal anesthesia is given	75(32.5%)	156(67.5%)
Who will take care, if any mishap occurs during surgery	67(29%)	164(71%)
Who will relieve pain postoperatively	36(15.6%)	195(84.4%)
Is anesthetist a qualified doctor	119(51.5%)	112(48.5%)
Is there any role of anesthetist after surgery	64(27.7%)	167(72.3%)
Is there any role of anesthetist outside operation theatre	66(28.6%)	165(71.4%)

Table-II. Awareness of patients regarding anesthesia & anesthesiologist

while 159(68.8%) patients left the choice on their surgeons.

Seventy one (30.7%) patients were given information regarding surgery by the primary surgeon while 160(69.3%) patients had not. 59(25.5%) patients had received information about anesthesia by the primary surgeon while 172(74.5%) patients had not received any information about anesthesia.

Table-III shows the difference of knowledge between the patients who had previous exposure of anesthesia and who had no exposure.

Out of 103 patients, who had previous exposure of anesthesia, 64 patients answered correctly about basic types of anesthesia techniques while 81 patients who had no previous exposure of anesthesia, answered incorrectly (P value = 0.000) (Table-III).

Fifty three patients who had previous exposure of anesthesia answered correctly that anesthetist is a qualified doctor, while 62 patients answered incorrectly who had no previous exposure (P value=0.546) (Table-III).

Thirty six patients who had previous exposure of anesthesia correctly answered about the person responsible for taking care during surgery if any

mishap occurs while 97 patients who had no exposure answered incorrectly (P value =0.051) (Table-III).

Out of 231 patients, 91 (39.39%) patients were in favor of having general anesthesia (G/A) while 52(22.51%) patients were in favor of regional anesthesia, while 88(38.0%) had left the choice on surgeon. Reason of preferring for general anesthesia was no / less risk 30 (12.98%) and fear of seeing things during surgery in regional anesthesia in 25(10.82%) (Table-IV).

DISCUSSION

Results of this study shows poor knowledge regarding anesthesia and role of anesthesiologist in managing the surgical patients. Only 51.6% patients knew that anesthetist is a qualified doctor. Same results are seen in the study conducted by Eyelade et al in Nigeria¹⁰.

However, in studies conducted in developed nations such as United Kingdom¹¹ and Hongkong⁵ shows highest rate of awareness i.e.78% and 70% respectively. The reason of this poor knowledge of patients regarding anesthetist may be limited interaction of anesthesiologist with their patients¹² and illiteracy.

Variables	Previous experience of anesthesia		Pearson Chi square	P-value
	Yes (Numbers)	No (Numbers)		
What are different types of anesthesia				
Correct answer	64	47	14.771	0.000
Incorrect answer	39	81		
Who will give you anesthesia				
Correct answer	54	55	2.049	0.97
Incorrect answer	49	73		
By which route G/A is given				
Correct answer	36	39	0.523	0.280
Incorrect answer	67	89		
By which route spinal anesthesia is given				
Correct answer	36	39	0.523	0.280
Incorrect answer	67	89		
Who will take care during surgery if mishap occurs				
Correct answer	36	31	3.193	0.051
Incorrect answer	67	97		
Is anesthetist a qualified doctor				
Correct answer	53	66	0.000	0.546
Incorrect answer	50	62		
Is there any role of anesthetist after surgery				
Correct answer	40	24	11.495	0.001
Incorrect answer	63	104		
Is there any role of anesthetist outside OT				
Correct answer	37	29	4.922	0.019
Incorrect answer	66	99		
Who will relieve pain postoperatively				
Correct answer	29	7	22.329	0.000
Incorrect answer	74	121		

Table-III. Relationship of previous experience of anesthesia with awareness

In our study, only 29% patients answered correctly that, in case of mishap in operation theatre anesthetist is responsible for resuscitation. Same results are seen in the study conducted by Birvan et al¹³.

The role of anesthesiologist is not well known to public and they have very limited knowledge about this specialty^{14,15}. Anesthesiologist has vital role outside the operation theatre such as in ICU, an obstetric unit, in pain management clinics and in resuscitation. Majority of our patients i.e. 71.4% stated that operation theatre is the only working

place for anesthetists. Same results are seen in the study conducted by Aydin E et al¹⁶ and Calman LM et al¹⁷.

Our study shows that patients with previous experience of anesthesia were more aware about anesthesia techniques as compare to those who has no exposure. Same is seen in the study conducted by Ahmed I¹⁸.

Variables	Numbers	%age
Reasons for preferring G/A		
No/ less risk	30	12.98
Fear of seeing things during surgery	25	10.82
Other choices not offered	15	6.49
Advise of relatives	8	3.46
Fear of spinal needle	12	5.19
Reason for refusal of G/A		
Sore throat	35	15.15
Will not regain consciousness	20	8.65
Expensive	15	6.49
Fear of death	74	32.0
Reasons for preferring regional anesthesia		
Safe	30	12.98
Want to awake during surgery	10	4.32
Advice of relatives	20	8.65
Less expensive	22	9.52
Want to see baby	15	6.49
Better post op pain control	25	10.82
Reasons for refusal of regional anesthesia		
Concern about headache	92	39.82
Concern about backache	80	34.63
Concern about numbness	10	4.32
Relatives bad experience	82	35.49
Don't want to awake during surgery	25	10.82

Table-IV. Reasons for preferring and refusal for specific anesthesia

In this study, 39.39patients opted for general anesthesia while, 22.51% patients wanted regional anesthesia and rest of the patients i.e. 38.09% had left choice on their primary surgeon. Same is seen in the study conducted by Ahmed I¹⁸, where 48.3% patients opted for G/A and 33.4% patients wanted regional anesthesia.

Most common reason for preferring G/A in this study was because 12.98 % patients think that G/A carries no or less risk and 10.82% patients preferred because of fear of seeing things during surgery. This shows poor knowledge and misconceptions in our patients regarding G/A. same is seen in the study conducted in Hongkong⁷.

The most common reason for refusing regional anesthesia was backache and headache. Same is seen in the study conducted by Johnson¹⁹.

This was observed that majority of responses were based on false beliefs and misconceptions. People have little knowledge about anesthesia and anesthesiologist. There is need to run awareness programmes to correct their false beliefs and misconceptions.

CONCLUSIONS

Results of the study show poor knowledge of patients regarding anesthesia and anesthesiologists. Majority of the patients were in favor of having general anesthesia rather regional anesthesia. There is need to correct the misconceptions of patients and to educate the public.

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