

Knowledge, Attitude and Perception of People of Rural India towards Anesthesia: An Observational Study

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ABSTRACT

Anesthesiologist plays a major role in operation theatre, intensive care unit, resuscitation and pain management. Despite the greater evolvement of the branch of anesthesiology over the past few years, the knowledge about the various aspects of anesthesia are limited and poorly understood among the general population both in developed as well as developing countries. Preanesthesia checkup (PAC) is an essential part for the better outcome of the patient. But the large numbers of patients believe that PAC is unnecessary and they try to rush through the PAC. This study was undertaken to evaluate the knowledge of the adult patients in rural set up presenting for elective surgery in secondary care institution regarding the importance of PAC. Patients aged 18-75 years were asked to fill modified Singla and Mangla questionnaire. Majority of the patients felt that PAC was one of the instructions by surgeons and most were not aware about the importance of PAC. It was also observed that graduates and post graduates had higher knowledge about anesthesia as compare to illiterates, primary and secondary educates. We conclude that patients have poor knowledge about pre anesthesia assessment in rural set up. So, efforts should be made to increase the knowledge of patients regarding PAC by the anesthesiologist.

Keywords: PAC, Singla and Mangla questionnaire, importance of PAC.

INTRODUCTION

Anesthesiologist plays a major role in operation theatre (OT), intensive care unit (ICU), resuscitation and pain management. Despite the greater evolvement of the branch of anesthesiology over the past few years, the knowledge about the various aspects of anesthesia are limited and poorly understood among the general population both in developed as well as developing countries.^{1,2} Generally the people think that anesthesia carries low profile as compared to other medical and surgical specialities.³

Preanesthesia checkup (PAC) is an essential part for the better outcome of the patient. PAC gives a chance to the anesthesiologist to fully assess the patient and order necessary investigations. PAC also gives a chance to the patient, to ask any queries regarding anesthesia. But the large number of patients believes that, PAC is unnecessary and they try to rush through the PAC. Patients also reckon that, PAC is just a waste of time and investigations ordered in PAC are waste of money.⁴ Patients also have a notion that anesthesiologists are responsible for delays and cancellation of the surgery.

So, we should give emphasis to educate the patients as well as general population about the importance of PAC and anesthesiologist, so that they fully cooperate during PAC and unnecessary delays of surgeries could be avoided.⁵ We undertook this study to evaluate the knowledge of the adult patients in rural set up presenting for elective surgery in secondary care institution regarding the importance of PAC.

MATERIAL AND METHOD

After taking written informed consent of patients, this observational study was carried out in all the patients of either sex, between 18 to 75 years of age, coming for various surgeries in the pre anesthesia clinic at Civil Hospital (CH) Nurpur. CH Nurpur is a secondary health care institution. The study was conducted over a period of 9 months in 114 patients.

EXCLUSION CRITERIA

1. Patient with hearing defect
2. Having altered mental status
3. Not able to speak
4. Person not willing to give answer
5. Age less than 18 years
6. Age more than 75 years

STUDY PROTOCOL

Patients were asked to fill modified Singla and Mangla questionnaire.⁶ The questionnaire was printed in both English and Hindi languages. If the patient was illiterate, questions were directly asked by the anesthetist. This questionnaire consisted of 15 questions in total. This questionnaire included multiple choice questions related to anesthesia and the patient had to select one among them. The questions were in two parts. First part, consisted of demographic characteristics of the patient like age, sex, education level and previous visit to the PAC (question 1- 4). The second part, consisted of exploratory questions like patient's understanding of PAC and its importance in the patient care (questions number 5-15). An option of don't know was also provided with most questions. Scoring

was done for questions 5-15, If patient answered correctly, he was awarded with 1 mark while for each incorrect answer 0 mark was given. If the answer was don't know, then also 0 mark were given. Statistical analysis was done in terms of percentages by using Chi square test. P value < 0.05 was considered as statistically significant.

RESULTS

The questionnaire was distributed among 114 patients over a duration of 9 months and their responses were analyzed. Among 114 patients, 42 (36.8%) were male and 72 (63.2%) were female. Patients belonging to different age groups and their education status can be seen in table 1.

Table 1: Patient variables

Variable	Number	Frequency
Age (year)		
18 – 30	56	49.12 %
31- 50	32	28.07 %
51- 75	26	22.8 %
Education status		
Illiterate	15	13 %
Primary education	24	21.05 %
Secondary education	59	1.7 %
Graduation	12	10.5 %
Post graduation	4	3.5 %

The patients who had previous visit in the PAC clinic were 24 (21.05 %). While 90 patients (78.9%) were coming for the first time in the PAC clinic.

When the patients were asked about the reason behind coming the PAC, 59.7 % said that, they were complying with the surgeon's instructions, 19.3 % thought that, they would be getting the date for surgery and only 14 % knew that, preanesthesia assessment would be done. On being asked, what was done in PAC, 40.4 % of the patients believed that PAC was for general assessment only, while 33.3 % reckoned that some test would be performed to assess for anesthesia fitness. Only 2.6% were aware of the fact that, in PAC assessment, risk stratification and optimization was done before surgery while remaining 23.7 % patients had no idea about PAC.

Only 14.04 % of the patients, knew that only anesthesiologist can perform a pre

anesthesia checkup. Majority of patients (64.03%) felt that, any doctor sitting in the clinic can perform a pre anesthesia checkup, while 18.42% of patients thought that, a pre

anesthesia checkup can be performed by a nurse or technician in clinic. The rest 3.51% of the patients were not knowing anything.

Table 2 : Patient's response to questionnaire

QUESTIONS	RESPONSE	TOTAL PATIENTS	PERCENTAGE
What do you think the reason behind doing the pre-anesthesia checkup?	To comply with surgeons instructions	68	59.7 %
	To get date for surgery	22	19.3 %
	For pre anesthesia assessment	16	14 %
	I do not know	8	7 %
What will be done in the pre-anesthesia checkup?	General assessment of patient done before anesthesia	46	40.4 %
	Some test is to be performed to assess anesthesia fitness	38	33.3%
	Assessment, optimization & risk stratification before surgery	3	2.6%
	I do not know	27	23.7%
Who can perform the pre anesthesia checkup?	Nurse/technician in clinic	21	18.42%
	Doctor sitting in clinic	73	64.03%
	Anesthesiologist in clinic	16	14.04%
	I do not know	4	3.51%
What is the important of pre-anesthesia checkup before surgery?	Reduce the risk of anesthesia & surgery	16	14.04%
	Required to get date for surgery	27	23.7%
	Legal documentation	12	10.51%
	I do not know	59	51.75%
Are condition like heart disease, breathing difficulties, renal problems have to be expressed before surgery?	Yes	34	29.83 %
	No	46	40.35%
	Not if well controlled	26	22.81 %
	I do not know	8	7.01%
If there is a preexisting medical condition, does it needs to be optimized before surgery?	Yes	22	19.3%
	No	17	14.9%
	Not required if not related to surgical condition	42	36.85%
	I do not know	33	28.95%
Are above mentioned conditions affect outcome of anesthesia & surgery?	Yes	36	31.58 %
	No	69	60.52 %
	I do not know	9	7.9 %
Does habits like drinking or smoking affect outcome of anesthesia & surgery?	Yes	31	27.19%
	No	37	32.46%
	I do not know	46	40.35 %
Is pre-anesthesia checkup required only when surgery is to be performed under anesthesia?	Yes	32	28.07 %
	No	40	35.09%
	I do not know	42	36.84%
When should you discuss your fear/quarries regarding anesthesia (if any)?	During visit the anesthesiologist before surgery	20	17.54 %
	In ward with surgery	75	65.79 %
	In operation theatre	12	10.53 %
	I do not know	7	6.14%
Do you follow any advice you will get in the preanesthesia checkup?	Yes, it is for my own good	26	22.81 %
	Yes, till surgery is performed	34	29.82 %
	Only if surgeon say so	42	36.84%
	I do not know	12	10.53%

On being asked about the importance of PAC before surgery, only 14.04 % were aware of the fact that PAC helped in reducing risk associated with surgery and anesthesia while 23.7 % believed that it was necessary to get a date for surgery. 10.51 % patients thought that, it was some kind of a legal document. Rest

51.75% patients did not know the exact reason.

When asked about the significance of preoperative comorbid conditions, only 29.83% believed that they should be told before surgery whereas 40.35% of the patients believed it useless to discuss about comorbid conditions. 19.3 % of the patients believed that comorbidities were required to

be optimized before surgery while 14.9 % believed that such conditions were not required to be optimized before surgery. About 36.85 % of the patients answered that no optimization of comorbidities was required before surgery if not related to the surgical condition. Only 31.58 % knew that presence of comorbid conditions can affect the outcome of anesthesia and surgery while 60.52% of the patients reckoned that, comorbid conditions do not affect the outcome of anesthesia and surgery.

65.79 % patients found it better to discuss their fears and queries regarding anesthesia with the surgeon in the ward, while 17.54 % patients were of the view of discussing their fears with the anesthesiologist in the PAC clinic. 10.53 % of the patients felt it better to discuss such feelings in operation theatre. Only 22.81% patients felt that they would follow preanesthesia checkup advice for their own good, while 29.82 % mentioned that they would follow pre anesthesia advice only till completion of surgery and 36.84% were of the view that they would do so only if the surgeon advises same.

We also observed that graduates and post graduates had higher knowledge about anesthesia as compare to illiterates, primary and secondary educates ($P = 0.03$). We also observed that, the patients who had previous visit to the PAC clinic, had higher scores as compared to those visiting for the first time ($P = 0.04$).

DISCUSSION

The knowledge of patients about the role of anesthesiologists is very superficial and poorly understood. In developing countries, only 50- 60 % patients know that anesthesiologists are also doctors.⁷ Due to less importance and recognition given to the anesthesiologist's by the patients, leads to frustration among anesthesiologists.⁸ Better awareness among patients, regarding anesthesia will help in more anesthesia related health facilities to the patients.^{9,10}

Our study demonstrated that there is no significant difference between male and

female regarding knowledge and perception about pre anesthesia checkups. Baaj et al, conducted a study on knowledge and attitude of patients toward anesthesia and anesthesiologist in 170 patients and they also observed that there is no gender difference in knowledge regarding anesthesia. They also found that only 55.3 % patients considered anesthesiologists as specialized doctors.¹¹ Similar findings were seen by Singla and Mangla, Sagun et al and Abofila et al.^{5,6,12}

Present study illustrated that, there is significant difference between level of education and knowledge regarding PAC. Postgraduates and graduates had higher understanding of PAC as compared to others. So, this highlights the fact that anesthesiologist must spend more time with the patients in the PAC clinic who are less educated. Similar outcomes were obtained by Baaj et al and Singla and Mangla.^{6,11}

The patients, who had previously visited the PAC had more knowledge about PAC. This fact was also demonstrated by Singla and Mangla in their study in rural India about patient knowledge and perception of PAC. They concluded that patients in rural set up had poor knowledge about PAC. They also identified that, only 18.1% of patients knew that, PAC can be performed only by the anesthesiologist.⁶ Similar findings were present in our study, only 14.03 % patients identified that only anesthetist can perform PAC.

Thus our study, demonstrates that patients in our area have poor knowledge regarding preanesthesia assessment and it's importance. We need to increase awareness among general population about anesthesia, which can be done by taking help from media sources like books, articles in newspapers, video films and magazines. This will help in better outcome of patients and also in development of speciality.

CONCLUSION

This study concludes that, patients have poor knowledge about pre anesthesia assessment in rural set up. So, efforts should

be made to increase the knowledge of patients regarding PAC by the anesthesiologist, which will result in decreasing perioperative mortality and morbidity.

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