

Patient's Knowledge and Perception of Pre-Anesthesia Check-Up in our GVPIHC & MT College

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Received Date: 19/09/2023

Acceptance Date: 12/10/2023

Abstract

Background: More and more patients these days understand the role of anaesthesiologists at the time of surgery and even during the postoperative period. Hence, study was commenced with a objective to assess patient's knowledge and perception on preanesthetic assessment. **Material and Methods:** An observational study was conducted at Gayatri Vidya Parishad Hospital, Visakhapatnam. 100 patients posted for elective surgery coming to PAC clinic over a period of 6 months were included. Written informed consent was obtained from all patients in their own language before starting study. Patients were asked to fill a questionnaire consisting of 12 questions. Scoring was done for questions 4–15, with each question answered correctly being given 1 mark while incorrect answer was awarded 0 marks. Data was entered in MS Excel and analyzed by using SPSS software version 21. **Results:** Out of 100 study participants 62% were male and 38% were female. The patients were in the age group between 18 to 60 years, about 31% were in < 30 years age, while 26% were in 30 to 45 years age. On being asked, when they had come to PAC clinic, about 32% of participants answered for pre anaesthesia assessment, while 46% said that they were following surgeon's instructions, 21% believed that they would be getting date for surgery there and 1% didn't know the exact reason. **Conclusion:** About only 32% of the study participants had knowledge of Pre anaesthesia assessment and remain had inadequate knowledge.

Key words: Knowledge, Patient, Preanesthesia check up

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Introduction

More and more patients these days understand the role of anesthesiologist at the time of surgery and even during the postoperative period. ^[1] Pre anesthesia check-up still remains a less cared aspect of anesthesia especially in rural India, where most patients believe it to be a waste of time. ^[2] Many studies in past have demonstrated limited knowledge among general public and even patients about various aspects of anesthesia. ^[3-7] However, patients' understanding of anesthesia and its importance is fast changing. Such patients try to rush through the preanesthesia check-up resulting in incomplete history and general physical examination. Even preoperative investigations advised are often seen as unnecessary wastage of money and preoperative optimization is not taken seriously. This not only undermines the purpose of preadmission anesthesia consultation (PAC) clinic, but also increases peri-operative morbidity and mortality.

Aim and Objective: To assess patient's knowledge and perceptions on preanesthetic assessment

Methodology

Study design: An observational cross sectional study

Study setting: Conducted at Gayatri Vidya Parishad Hospital, Visakhapatnam.

Study period: 6 Months, March – August 2023

Study population: Patients posted for elective surgery coming to PAC clinic during study period were included.

1. Inclusion criteria:

- patients aged between 18 and 60 years of age
- both male and female.

2. Exclusion criteria:

- Patients with hearing problems, unable to speak and with altered mental status.
- Refused

Sample size: 100

- Calculated based on following formula. Based on previous study Singala D et al., ^[1] who found that 27.4% had knowledge about preanesthesia assessment

$$n=4pq/l^2$$

$$= 4*27.4*72.6/ 10*10 = 7956.9 / 100 =79$$

Rounded to 100

- Where p is proportion of participants had knowledge is 27.4%
- q=100-p
- l=allowable error =10%
- The minimum sample size required is 100.

Ethical considerations: Written informed consent was obtained from all patients in their own language before starting study.

Study tool: Patients were asked to fill a questionnaire consisting of 15 questions. Scoring was done for questions 4–15, with each question answered correctly being given 1 mark while incorrect answer was awarded 0 marks.

Statistical analysis: Data was entered in MS Excel and analyzed by using SPSS software version 21. Categorical data was represented as percentages and chi-square test was used to know statistical significance. P value <0.05 was considered as statistically significant.

Observations and Results

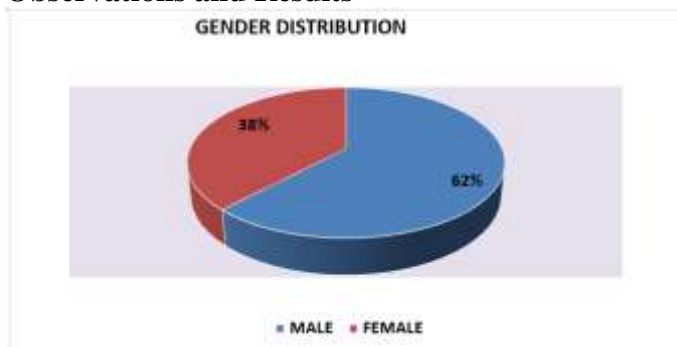


Figure 1: Gender distribution of study population

Out of 100 study participants 62% were male and 38% were female.

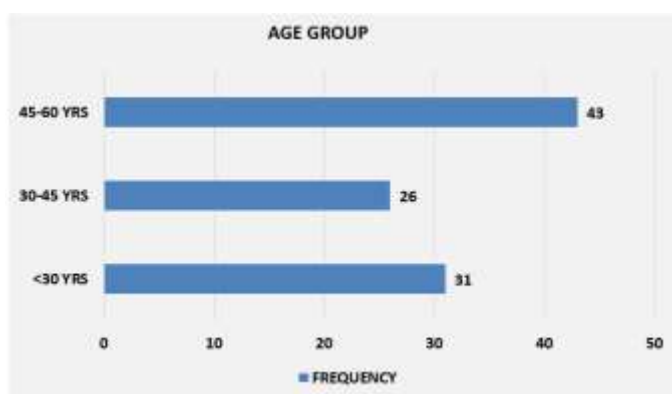


Figure 2: Age group distribution

The patients were in the age group between 18 to 60 years, about 31% were in < 30 years age, while 26% were in 30 to 45 years age.

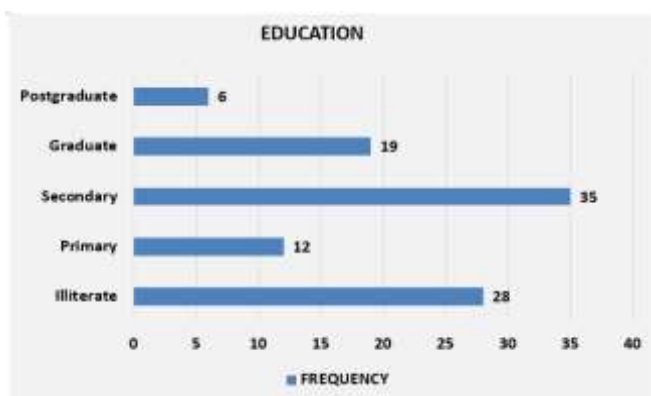


Figure 3: EDUCATION

About 28% of the study participants were illiterates, 35% of study population were studied up to secondary school, 19% were studied up to degree.

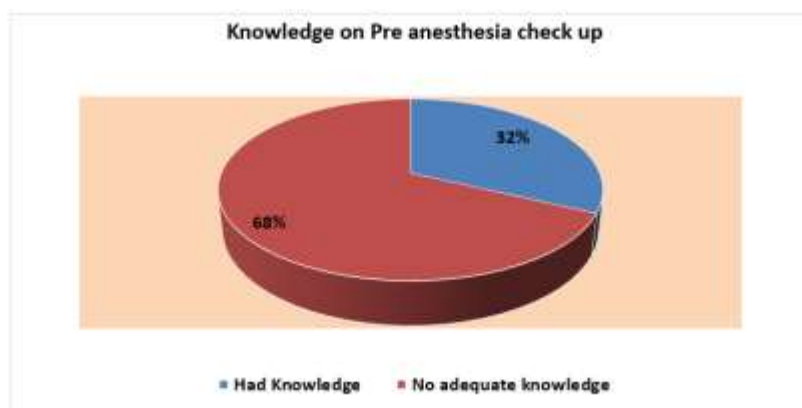


Figure 4: Distribution of study participants based on knowledge about Preanesthesia check up

About only 32% of the study participants had knowledge of Pre anaesthesia assessment and remain had inadequate knowledge.

Table 1: Distribution of study population based on Knowledge on preanesthetic assessment

	FREQUENCY	PERCENTAGE
Answered well	32	32%
Following surgeons instructions	46	46%
Believed that they would be getting date for surgery there	21	21%
Don't know the exact reason	1	1%
Total	100	100%

On the presnesthsia assessment 32% of participants were answered well, 46% were following surgeons instructions. 21% believed that they would be getting date for surgery there.

Table 5: Responses from study participants

Questions	Responses	Percentage
Q1. Have you ever been come to Pre-anaesthesia clinic previously?	Yes	28%
	No	72%
Q2. Why have you come to anaesthesia clinic?	To comply with surgeon's instructions	46%
	To get date for surgery	21%
	For pre anaesthesia assessment	32%
	I do not know	1%
Q3. What is done in a pre-anaesthesia clinic?	General Assessment of patient done before	39%
	Some test is to be performed to assess anaesthesia fitness.	38%
	Assessment, Optimization and risk stratification before surgery	6%
	I do not know	17%
Q4. Who can perform	Nurse/technician in PAC clinic	22%

preanesthetic check up?	Doctor sitting in PAC clinic	57%
	Anaesthesiologist in PAC clinic	16%
	Don't know	5%
Q5. What is the importance of pre anesthesia check-up before surgery?	Reduces the risk of anesthesia and surgery	16%
	Required to get date for surgery	28%
	Legal documentation	18%
	I do not know	39%
Q6. Are conditions like heart disease, breathing difficulties, renal problems have to be expressed before surgery?	Yes	33%
	No	26%
	Not if well controlled	28%
	I do not know	13%
Q7. If there is a pre- existing medical condition, does it needs to be optimized before surgery	Yes	23%
	No	16%
	Not required if not related to surgical condition	39%
	Don't know	22%
Q8. Are above mentioned conditions affect outcome of anaesthesia and surgery?	Yes	34%
	No	49%
	I do not know	17%
Q9. Does habits like drinking or smoking affect outcome of anaesthesia and surgery?	Yes	25%
	No	37%
	I do not know	38%
Q10. Is pre-anaesthesia check-up required only when surgery is to be performed under anaesthesia?	Yes	34%
	No	29%
	I do not know	37%
Q11. When should you discuss your fears/quarries regarding anaesthesia (if any)?	In pre-anaesthesia clinic	18%
	In ward with surgeon	55%
	In operation theatre	16%
	I do not know	11%
Q12. Do you follow any advice you will get in a Pre-anaesthesia clinic?	Yes, it is for my own good	20%
	Yes, till surgery is performed.	29%
	Only if surgeon says so	32%
	I do not know	19%

Discussion

It is a well-established fact that preanesthetic assessment is an important aspect of patient care. Preanesthetic evaluation includes history taking, proper physical examination and laboratory investigations. The aim of preanesthetic check-up is to optimize a patient before surgery, so as to reduce the risk of anaesthesia and surgery as far as possible and improve outcome. Furthermore, it provides an opportunity for the patient to discuss any queries or fears regarding anaesthesia. Hence, if a patient shows a lack of interest during PAC or tries to rush through it, the task of anaesthesiologist becomes more difficult. This may result in patient being inadequately optimized before surgery. And it is a well-established fact that both the patient's preoperative physical status and surgical procedure affects morbidity and mortality during surgery.^[8]

The knowledge among the general public,^[3,4] patients,^[5-7] paramedical staff,^[2] and even surgeons^[9] regarding various aspects of anesthesia is limited. Picture is even

depressing in developing countries where only 50–60% of the patients consider anesthesiologist to be a doctor^[10] as compared to 90–99% patients in developed countries.^[11,12] Though many reasons can be attributed to this, one of the major reasons is that the patient first goes to a surgeon for their disease and is later referred to an anesthesiologist.^[13]

In the present study majority were male i.e. 62%. These findings were concurrence with Singla D et al.,^[1] study who observed that majority of the study population were male (64.7%). In the present study 32% of study participants had knowledge about preanesthetic check up. Similar findings were observed in a study done by Singla D et al.,^[1] who found that 27.4% had knew that they had to come for PAC clinic for pre anaesthesia assessment.

Further patients may be having certain fears or questions, all of which surgeon cannot answer. These include fear of pain or awareness during surgery, queries regarding type of anesthesia that can be offered and postoperative pain. Chew et al.^[7] in a study showed that patients were more afraid of postoperative pain, and their main fear of surgery was that they may not be able to come out of anesthesia. Similarly in a study by Ahsan-Ul-Haq et al., 40% of the patients were afraid of surgery while 60% were afraid of anesthesia.^[14] These concerns can be more appropriately addressed in PAC clinic.

The patients should understand that complete and through preanesthetic assessment and optimization goes a long way to improve operative outcome. Not only patients, the general public should be educated about the value of various aspects of anesthesia.

Limitations

- The relationship between lack of PAC related knowledge and inadequate preanesthesia optimization was not studied.
- The impact of lack of such knowledge on operative outcome was not assessed.

Conclusion

- Out of 100 study participants 62% were male and 38% were female. The patients were in the age group between 18 to 60 years, about 31% were in < 30 years age, while 26% were in 30 to 45 years age .
- About only 32% of the study participants had knowledge of Pre anaesthesia assessment and remaining had inadequate knowledge.
- Majority of the study participants had inadequate knowledge about pre anesthesia check up hence efforts should be taken by all anesthesiologists to emphasize the importance of pre anesthesia check up to reduce the perioperative morbidity & mortality.

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Conflicts of interest: No

Source of funding: Nil