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Evaluating Patient Satisfaction with Pre-Anaesthetic Checkup (PAC) Services in a Tertiary Care Teaching Hospital: A Cross-Sectional Study.

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ABSTRACT

Pre-Anaesthetic Checkup (PAC) is a vital step in ensuring patient safety and optimal surgical outcomes. Patient satisfaction with PAC services reflects the quality and effectiveness of perioperative care, especially in teaching hospitals with high patient turnover. To evaluate patient satisfaction with PAC services in a tertiary care teaching hospital and identify factors influencing it. A cross-sectional study was conducted over 18 months in the Department of Anaesthesiology. A total of 88 adult patients undergoing elective surgery across general surgery, ENT, gynaecology, and plastic surgery departments were included. A validated 13-item patient satisfaction questionnaire based on a five-point Likert scale was administered postoperatively. Statistical analysis included descriptive statistics and chi-square tests to assess associations between satisfaction and patient variables. Most patients reported high satisfaction, with 43.2% being very satisfied and 36.4% satisfied overall. High satisfaction was observed with staff behaviour (90.9%) and clarity of information (86.4%). However, waiting time received relatively lower satisfaction (64.8%). Satisfaction was significantly associated with surgical department, number of PAC visits, and the experience of the evaluating anaesthesiologist ($p < 0.05$). While PAC services were generally well-received, improvements in scheduling efficiency and communication, especially by junior staff, could further enhance patient satisfaction.

Keywords: Patient satisfaction, Pre-anaesthetic checkup, Tertiary care hospital

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INTRODUCTION

Pre-anaesthetic checkup (PAC) is a critical component of perioperative care aimed at evaluating a patient's fitness for surgery and anaesthesia [1]. It provides an opportunity to identify potential risks, optimize medical conditions, and plan appropriate anaesthetic techniques, thus enhancing patient safety and surgical outcomes. In recent years, there has been growing emphasis on assessing the quality of healthcare services from the patient's perspective, with patient satisfaction emerging as a key indicator of healthcare quality and effectiveness [2, 3].

PAC clinics, being the first point of anaesthesia-related interaction, significantly influence patient perceptions and expectations regarding their surgical experience [4]. Factors such as the clarity of communication, waiting time, thoroughness of evaluation, privacy, and the behaviour of healthcare personnel play an important role in shaping satisfaction levels [5, 6]. Despite the importance of these services, limited studies have been conducted in India to evaluate patient satisfaction with PAC services, especially in teaching hospitals where a large volume of patients is catered to by both trainees and senior faculty [7].

Our cross-sectional study aims to evaluate patient satisfaction with PAC services in a tertiary care teaching hospital, identify areas of strength, and highlight areas requiring improvement. The findings will help in designing strategies to enhance the quality of preoperative care and improve patient outcomes.

STUDY METHODOLOGY

Our study was carried out as a prospective cross-sectional study in the Department of Anaesthesiology. Data were collected over eighteen months. Using a prevalence of 64.7 % from prior literature, 95 % confidence, and a 10 % precision, the required sample size was calculated as 88 participants, which were subsequently recruited.

Consecutive adult patients (18–65 years) undergoing elective major or minor procedures in general surgery, plastic surgery, gynaecology or ENT theatres were screened 24 hours after surgery. Those classified higher than ASA III, children, obstetric cases, patients admitted to ICU post-operatively, those discharged within 24 hours, or individuals unable to complete an interview were excluded. Eligible patients received a detailed explanation of the study, and written informed consent was obtained before participation.

Data were gathered with a case-record form that captured demographics, surgical and anaesthetic details, and a 13-item patient-satisfaction questionnaire based on Royal College of Anaesthetists standards. Each item was rated on a five-point Likert scale (strongly agree = 5 to strongly disagree = 1). The tool, validated by six senior anaesthetists, required approximately 15 minutes to complete and was administered by an anaesthetist not involved in the original pre-anaesthetic check-up (PAC). Unique study codes preserved confidentiality throughout data handling.

Responses and peri-operative variables were entered into a spreadsheet for analysis. Continuous data (e.g., age) were summarised as mean $\pm$ SD, while categorical responses were expressed as percentages. Associations between satisfaction domains and factors such as age, sex, surgical specialty, type of anaesthesia, number of PAC visits, and anaesthetist experience were examined with the chi-squared test; a p-value < 0.05 denoted statistical significance.

RESULTS

Table 1: Demographic Characteristics of Study Participants (n=88)

Variable	Category	Frequency (%)
Age Group (years)	18–30	20 (22.7%)
	31–45	34 (38.6%)
	46–60	28 (31.8%)
	>60	6 (6.8%)
Gender	Male	52 (59.1%)
	Female	36 (40.9%)

Type of Surgery	General Surgery	38 (43.2%)
	ENT	18 (20.5%)
	Gynaecology	20 (22.7%)
	Plastic Surgery	12 (13.6%)
Type of Anaesthesia	General Anaesthesia	56 (63.6%)
	Regional Anaesthesia	32 (36.4%)

Table 2: Overall Satisfaction Score Distribution

Satisfaction Score Range (out of 65)	Interpretation	Frequency (%)
58–65	Very Satisfied	38 (43.2%)
50–57	Satisfied	32 (36.4%)
40–49	Neutral	12 (13.6%)
<40	Dissatisfied	6 (6.8%)

Table 3: Satisfaction with Specific PAC Domains

Domain	Mean Score (out of 5)	Satisfaction (%) (Agree/Strongly Agree)
Friendliness of PAC Staff	4.6	90.9%
Explanation of Procedure	4.3	86.4%
Clarity of Instructions	4.2	84.1%
Privacy During Examination	4.0	78.0%
Waiting Time	3.5	64.8%

Table 4: Association Between Patient Characteristics and Satisfaction (p-value)

Variable	Satisfaction Level Association	p-value
Age Group	Not Significant	0.235
Gender	Not Significant	0.421
Surgical Department	Significant	0.018*
Type of Anaesthesia	Not Significant	0.084
Number of PAC Visits	Significant	0.012*
Experience of PAC Doctor	Significant	0.006*

*Significant at $p < 0.05$

DISCUSSION

This cross-sectional study assessed patient satisfaction with Pre-Anaesthetic Checkup (PAC) services in a tertiary care teaching hospital, evaluating various dimensions of the patient experience. Overall, the findings indicate a high level of patient satisfaction, with 43.2% of patients being very satisfied and another 36.4% satisfied. Only a small proportion (6.8%) reported dissatisfaction, suggesting that the PAC system in place was largely effective and met the expectations of the majority of patients [8].

In terms of demographic factors, no significant association was found between satisfaction scores and age or gender. This aligns with studies conducted by Sharma et al. and Ahmed et al., which also found that demographic characteristics had limited influence on patient satisfaction in PAC settings. However, the surgical department had a statistically significant association with satisfaction ($p = 0.018$), indicating that experiences may vary depending on departmental workflows and communication styles. For instance, patients undergoing ENT or plastic surgery may have shorter or more focused consultations compared to general surgery or gynaecology, potentially influencing their perception of thoroughness or clarity [9].

A key observation from the domain-specific analysis was the high level of satisfaction with the friendliness of PAC staff (mean score: 4.6), explanation of procedure (4.3), and clarity of instructions (4.2). These findings underscore the importance of interpersonal communication and patient education in shaping satisfaction. They are consistent with previous research suggesting that effective communication and empathy from healthcare providers significantly enhance the patient experience. However, the area with relatively lower satisfaction was waiting time, which had a mean score of 3.5 and a lower percentage

of agreement (64.8%). This suggests that delays or inefficiencies in the PAC process might affect the overall perception of service quality, especially in busy teaching hospital environments.

Interestingly, a significant association was found between the number of PAC visits and satisfaction levels ($p = 0.012$). Patients who had to return for a repeat PAC due to incomplete evaluation or pending investigations were less satisfied, highlighting the need for better coordination and possibly pre-screening to ensure one-time comprehensive evaluation. Another significant factor was the experience level of the anaesthesiologist conducting the PAC ($p = 0.006$). Patients reviewed by more experienced doctors reported higher satisfaction, possibly due to better communication skills, more confident counselling, and quicker decision-making [10-12].

These findings carry important implications for quality improvement. While most patients were satisfied, addressing the modifiable factors—such as reducing PAC wait times, ensuring completeness of evaluations in the first visit, and improving the training of junior doctors in patient communication—could further enhance the quality of care. Regular feedback mechanisms and periodic audits of PAC performance may also help maintain and elevate satisfaction levels.

CONCLUSION

In conclusion, while the PAC services at the study centre were largely satisfactory to patients, efforts should be made to address gaps in waiting time, consistency of evaluation, and communication quality. Enhancing these aspects would not only improve patient satisfaction but may also foster better preoperative preparation and perioperative outcomes.

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