

Role of Pre-anesthetic communication to reduce the degree of anxiety in patients undergoing surgical intervention

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Abstract: Background: There is prevalence of high degree of preoperative anxiety in patients with elective surgery. Perioperative anxiety is often overlooked, but it is associated with poor surgical outcome. Lack of adequate and timely information to patients during the pre-anesthetic consultation increases patient anxiety. Various study revealed that patients receiving better pre-anesthetic information during the visit with the anesthesiologist showed reduced rates of anxiety compared to those who did not receive it. This study was undertaken with the objective of assessing the effect of pre anesthetic consultation on anxiety level in the patients posted for elective surgery under general and regional anaesthesia.

Material & Methods: This observational study was conducted among 150 patients at DR.RKGMC Tanda, Himachal Pradesh. Patient's anxiety level was assessed utilizing questionnaire having the Amsterdam Preoperative Anxiety and Information Scale. Data was analyzed using Epi info v7 software using appropriate statistical tests.

Results: In the current study, the mean age of the participants was 45.43 ± 17.86 years with a range of 18-75 yrs. About 52% of the patients belonged to ASA Grade-II, 45% of the patients to Grade-I and 3% of the patients to Grade III. 33% of the patients were graduate followed by 20% with higher secondary, 19% with secondary, 15% with matriculation and 12% of the patients with primary education status. About 58.7% of the patients reported anxiety before PAC which was reduced to 39% after PAC.

Keywords: Anxiety, Pre-anaesthetic communication, General anesthesia

INTRODUCTION

Preoperative anxiety is a challenging problem in the preoperative care of patients. A common low level of anxiety is an expected reaction to the unpredictable and potentially life-threatening circumstances, especially for a patient's first surgical experience. However, higher and extended level of preoperative anxiety results in a delay in wound healing as well as requires larger doses of anaesthetics and recovers poorly. Studies also showed that a large proportion of surgical patients experience considerable preoperative anxiety and the incidence being 60–80% of surgical patients.¹

The most frequent sources of anxiety in patients before a surgical intervention includes fear of pain, fear of death, fear of the outcome of the intervention, although these fears are modulated by the patient's personality, their previous experience, and their baseline trait anxiety.²

Some degree of anxiety is a natural reaction to the unpredictable and potentially threatening circumstances typical of the preoperative period, especially for the patient's first few surgical experiences. However, excessive degrees of preoperative anxiety can lead to pathophysiological responses. These include tachycardia, hypertension, arrhythmias, and higher levels of pain that may persist into the postoperative period.³

The subjective methods to assess anxiety are Spielberg's State-Trait Anxiety Inventory STAI⁴, the Amsterdam Preoperative Anxiety and Information Scale – APAIS⁵, and Visual Analogue Scale for Anxiety – VAS-A by Kindler et al.⁶

A number of studies conducted in different parts of India reveal that listening to the patient and providing them all the information they need will reduce their anxiety,⁷ and that this reduced level of anxiety can be determined by administering an anxiety assessment test. Hence, this study was undertaken with the objective of assessing the effect of pre anesthetic consultation on anxiety level in the patients posted for elective surgery under general and regional anaesthesia.

MATERIAL AND METHODS

Study Design: Observational

Study Area: Department of Anaesthesiology, Dr RPGMC Kangra at Tanda, Himachal Pradesh.

Study Population- After approval by institutional Ethical Committee the study was carried out on 150 patients of both gender in age group of 18-80 years. Patients were ASA I-III, scheduled for elective surgeries.

Study duration: Jan 2021- Oct-2021

Sample Size: All the patients within this duration and who fulfilled our inclusion and exclusion criteria were included in the study

Inclusion criteria –The patient belonging to American Society of Anaesthesiology physical status I/III aged 18–80 years, scheduled for elective surgery under regional or general anaesthesia were included in the study.

Exclusion criteria

- Emergency surgery
- History of psychiatric disorder
- Patients undergoing long-lasting treatment

Description of Tool: Section A-Socio-demographic characteristics of the patients (Age, Gender etc.)

Sections B- The patients' anxiety level was assessed utilizing questionnaire having the Amsterdam Preoperative Anxiety and Information Scale (APAIS) translated in Hindi /English language. The APAIS consists of six items on two scales: APAIS-Anxiety (four items) and APAIS-Need-for-Information (two items). APAIS-Anxiety has two subscales: Anxiety about Anaesthesia (two items) and Anxiety about Surgery (two items). Patients having APAIS < 11 were considered to be non-anxious, while patients with anxiety (≥ 11 on the APAIS-Anxiety scale) were considered anxious. The patients were assessed twice, one day prior to surgery while doing scheduled pre-anaesthetic visit and half an hour prior to induction. The patients were educated about the anaesthesia technique during pre-anaesthetic visit and were pre-medicated with tablet Alprazolam 0.25mg at night prior and 6am in the morning of surgery. The patients were provided anaesthesia as per the standard of care protocol of institution at the discretion of the attending anaesthesiologist.

Statistical Analysis

The data were entered into the Microsoft® Excel workbook 2019 and exported into Epi info v7 software. The quantitative variables were expressed as mean \pm SD, and compared using Student t-test. Categorical variables were expressed as frequency and percentage. The P-value (<0.05) was considered to be significant.

RESULTS

The prospective and observational study assessed the incidence of preoperative anxiety in the patients scheduled for surgery under general/regional anaesthesia. A total of 150 ASA I and II patients, aged between 18 to 80 years, scheduled for elective surgery under regional and general anaesthesia were included.

In the current study, 51.3% were females and 48.7% were male. The mean age of the participants was 45.43 ± 17.86 years with a range of 18-75 yrs. About 52% of the patients belonged to ASA Grade-II, 45% of the patients to Grade-I and 3% of the patients to Grade III. 33% of the patients were graduate followed by 20% with higher secondary, 19% with secondary, 15% with matriculation and 12% of the patients with primary education status.

In the present study the patients with APAIS > 11 were considered to have anxiety while < 11 were considered as no anxiety. There was a significant decrease in anxiety after PAC in comparison to before PAC as shown in table 1.

Table1: Patients assessed before/after Preanaesthetic Checkup [PAC]

	Before seen in PAC	After seen in PAC	P value
No anxiety	62 (41.3%)	113 (27.5%)	<0.0001
Anxiety	88 (58.7%)	37 (39.1%)	

DISCUSSION

The results obtained in our study appear to support our hypothesis and emphasize the importance of using the pre-anaesthesia consultation not only to detect potential surgical or anaesthesia-related risks, but also to reduce anxiety and facilitate the entire perioperative process by providing patients with the correct information. Similarly, in the study by Mulugeta et al.⁸ the preoperative information resulted in decrease in anxiety (40.7%) as compared to having no preoperative information having anxiety level of (59.3%). Similarly, Niggusse et al.⁹ observed that no preanaesthetic information resulted in increased incidence of anxiety [P=0.048]. E. Porcar et al.² and Boker et al.¹⁰ also supported our findings that information plays a great role in reduction of preoperative anxiety. It is suggested that communication should take place prior to the day of surgery to help discover and dissipate misapprehensions and underline safe, controlled anesthesia.

CONCLUSION

The pre-anesthesia consultation reduces anxiety levels in surgical patients. This emphasizes the importance of the pre-anesthesia consultation in identifying and managing anxiety. Residents working in the department of anaesthesia should also be trained for effective communication while doing preanesthetic checkup. Further studies are also needed to evaluate various scales to assess anxiety and predictive factors leading stress.

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