

Patient Awareness and Perceptions of Anesthesia: Findings from A Cross-Sectional Survey in A Pre-Anesthetic Evaluation Clinic

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Abstract:

Background:

Adequate patient knowledge and a positive attitude toward anesthesia are essential for informed consent and perioperative cooperation. Limited awareness about anesthesia remains a challenge in developing healthcare settings, particularly among patients attending pre-anesthesia clinics. **Objectives:** To assess the knowledge and attitudes toward anesthesia among patients attending a pre-anesthesia clinic in a tertiary care center. **Methods:** This cross-sectional survey was conducted among 440 patients attending a pre-anesthesia clinic at a tertiary care hospital. Data were collected using a structured questionnaire assessing demographic characteristics, educational status, awareness of anesthesia, and prior exposure to anesthesia. Descriptive statistics were used to analyze the data. **Results:** Of the 440 participants, 60% were male and 40% were female. A majority of patients (65%) were uneducated, while 35% had some level of formal education. Overall, only 23% of patients reported having knowledge about anesthesia. Among these, 10% had previous experience with anesthesia. Awareness and understanding of anesthesia were notably lower among uneducated patients compared to educated patients. **Conclusion:** The study reveals a low level of knowledge regarding anesthesia among patients attending a pre-anesthesia clinic, particularly among uneducated individuals. These findings highlight the need for structured patient education and counseling during pre-anesthetic evaluation to improve awareness, alleviate anxiety, and promote informed decision-making.

Key words: Anesthesia, Attitude, Awareness, Knowledge, Preanesthesia check

Introduction:

Anesthesia is a fundamental pillar of modern medical and surgical practice, enabling the safe and humane performance of a wide range of operative and diagnostic procedures.^[1-3] The evolution of anesthetic drugs, airway management techniques, monitoring modalities, and perioperative care protocols has significantly improved patient safety and surgical outcomes over the past few decades. Mortality and morbidity associated with anesthesia have declined substantially due to advancements in pharmacology, monitoring standards, and training. Despite these developments, awareness among patients regarding anesthesia as a specialty, its procedures, associated risks, and the role of anesthesiologists remains suboptimal, particularly in developing countries.^[4,5]

Inadequate knowledge about anesthesia often contributes to misconceptions, fear of intraoperative awareness, fear of not waking up after surgery, concerns regarding postoperative pain, and anxiety related to complications. [6-8] These misconceptions may increase preoperative stress levels and negatively impact patient cooperation during perioperative care. Moreover, informed consent requires that patients possess at least a basic understanding of the procedure they are about to undergo, including anesthesia. When awareness is poor, the quality of informed decision-making may be compromised. [9,10]

The pre-anesthesia clinic (PAC) plays a crucial role in perioperative assessment and risk stratification. It provides an opportunity not only for medical optimization but also for patient education and psychological reassurance. However, patients presenting to tertiary care centers often come from diverse educational and socioeconomic backgrounds, which can significantly influence their level of understanding. In this context, evaluating patient knowledge and attitudes toward anesthesia becomes essential for identifying gaps and implementing targeted educational interventions. The present study was therefore undertaken to assess the knowledge and attitudes toward anesthesia among patients attending a pre-anesthesia clinic in a tertiary care center over a six-month period from January 2022 to June 2022.

Materials and methodology:

This hospital-based cross-sectional survey was conducted in the pre-anesthesia clinic of a tertiary care teaching hospital between January 2022 and June 2022. The study included adult patients aged 18 years and above who attended the clinic for preoperative evaluation prior to elective surgical procedures. A total of 440 patients who fulfilled the inclusion criteria and provided informed consent were enrolled in the study. Patients unwilling to participate or those with communication barriers or cognitive impairment were excluded. Data were collected using a structured questionnaire (Table 1) designed to gather demographic information including gender and educational status, assess awareness of anesthesia, document previous exposure to anesthesia, and evaluate general attitudes toward anesthetic procedures.

The questionnaire was administered in a language understood by the patient, and assistance was provided where required. Data were compiled and analyzed using descriptive statistical methods. Frequencies and percentages were calculated to summarize the findings. The statistical interpretation focused on distribution patterns and associations between awareness and demographic characteristics.

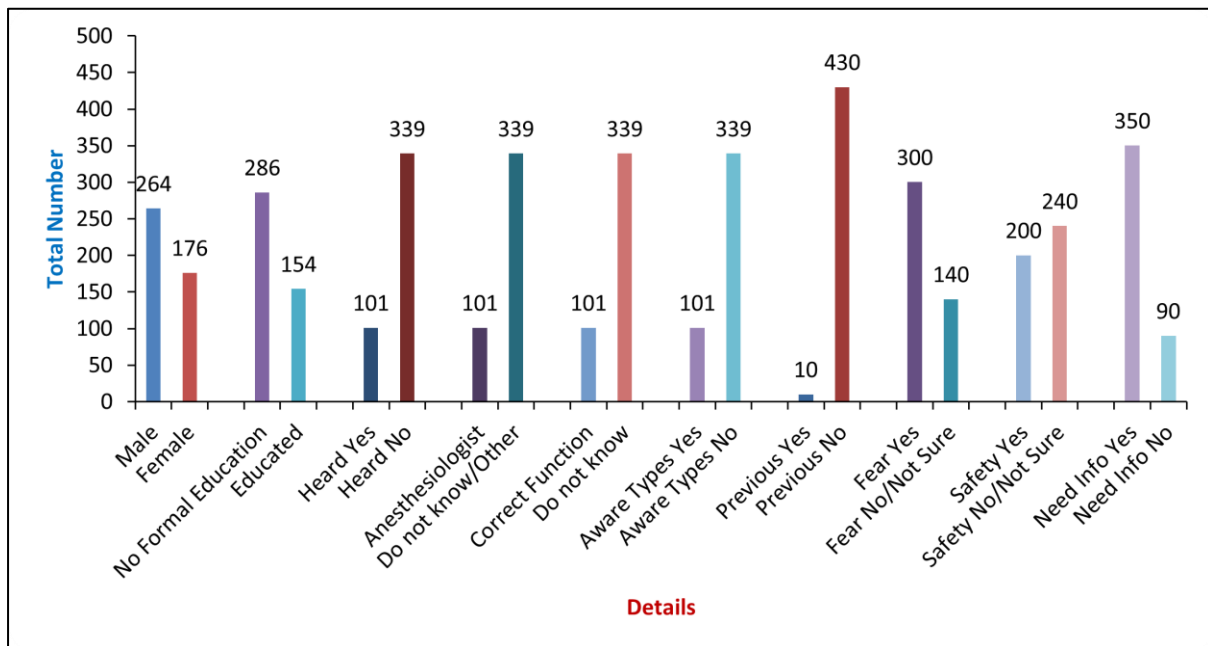
Table 1: Questioner for assessment of demographics, educational status, attitude and awareness about anesthesia

Question and Options
1. Gender: ☐ Male ☐ Female
2. Educational Status: ☐ No formal education ☐ Primary education ☐ Secondary education ☐ Higher secondary ☐ Graduate and above
3. Have you heard about anesthesia before today? ☐ Yes ☐ No
4. Do you know who administers anesthesia during surgery? ☐ Surgeon ☐ Anesthesiologist ☐ Nurse ☐ Do not know
5. What do you think anesthesia does? ☐ Makes the patient unconscious ☐ Relieves pain ☐ Both ☐ Do not know
6. Are you aware that there are different types of anesthesia (general, spinal, local)? ☐ Yes ☐ No
7. Have you ever received anesthesia before? ☐ Yes ☐ No If yes, type: ☐ General ☐ Spinal

☐ Local ☐ Do not know
8. Are you afraid of receiving anesthesia? ☐ Yes ☐ No ☐ Not sure
9. Do you believe anesthesia is safe when administered by a qualified doctor? ☐ Yes ☐ No ☐ Not sure
10. Would you like more information about anesthesia before your surgery? ☐ Yes ☐ No

Results:

A total of 440 patients participated in the study and is represented in graph 1. Of these, 264 patients (60%) were male and 176 patients (40%) were female. The gender distribution demonstrates a male predominance among patients attending the pre-anesthesia clinic during the study period. Regarding educational status, 286 patients (65%) were uneducated, while 154 patients (35%) had received some level of formal education. This indicates that nearly two-thirds of the study population lacked formal education, which may significantly influence their understanding of medical procedures. Assessment of awareness revealed that only 101 patients (23%) reported having knowledge about anesthesia, whereas 339 patients (77%) were unaware of anesthetic procedures. These finding highlights that nearly three out of four patients presenting for surgery lacked even basic awareness regarding anesthesia. Among the 101 patients who were aware of anesthesia, only 10 patients (approximately 10% of the aware group) reported previous exposure to anesthesia. The remaining 91 patients were aware of anesthesia through indirect means such as social exposure or information from others. Awareness was observed to be comparatively higher among educated individuals and among those who had prior anesthetic experience.



Graph 1: Distribution of participants depending upon the feedback received by participants.

Discussion:

The findings of the present study demonstrate a markedly low level of awareness regarding anesthesia among patients attending a pre-anesthesia clinic in a tertiary care hospital, with only 23% reporting prior awareness of anesthetic practice. This observation is consistent with earlier surveys indicating that patient knowledge about anesthesia and the role of anesthesiologists remains inadequate across different populations. Shevde and Panagopoulos reported in their classic survey of 800 patients that a significant proportion of surgical patients lacked adequate understanding of anesthesia and the responsibilities of anesthesiologists.^[10] Similarly, Klafta and Roizen observed that many patients harbored misconceptions regarding anesthesia, including fear of intraoperative awareness and not waking up after surgery, largely due to insufficient preoperative information.^[11]

More recent studies continue to highlight this knowledge gap. Marulasiddappa and Nethra reported that nearly half of their study population had poor knowledge about anesthesia and were unaware that anesthesiologists are specialized physicians.^[12] In a cross-sectional study conducted in Ethiopia, Gelaw et al. found that approximately two-thirds of patients had poor knowledge regarding anesthesia and anesthesiologists, with educational status being a significant predictor of awareness.^[13] These findings are comparable to the present study, where 65% of participants were uneducated and awareness levels were proportionately low.

Educational status plays a crucial role in health literacy, comprehension of medical information, and the ability to participate in informed decision-making. Studies have consistently demonstrated a positive correlation between formal education and improved knowledge regarding anesthesia. Patients without formal education may rely on anecdotal information, cultural beliefs, or hearsay, which may perpetuate misconceptions and fear.

The present study also demonstrated that previous exposure to anesthesia was associated with better awareness, although only a small proportion of patients had prior experience. Similar findings were reported by Eyelade et al., who observed that patients with prior anesthetic exposure had significantly better knowledge compared to first-time surgical candidates.^[14] However, even among patients with prior exposure, misconceptions persisted, suggesting that experience alone may not be sufficient unless accompanied by structured preoperative counseling.

The persistent gap in anesthesia awareness, despite technological and safety advancements, indicates that improvements in surgical care have not necessarily translated into improved patient understanding. Effective communication strategies during pre-anesthetic evaluation are therefore essential. Structured counseling sessions, educational leaflets, and audiovisual aids have been shown to improve patient knowledge and reduce anxiety levels. Enhancing patient education not only strengthens informed consent but also promotes trust and reduces perioperative fear.

Conclusion:

The present study demonstrates that awareness and knowledge regarding anesthesia among patients attending a pre-anesthesia clinic remain considerably low, with 77% of patients lacking basic understanding. Educational status and previous exposure to anesthesia appear to influence awareness levels significantly. Given that a majority of the study population was uneducated, targeted patient education strategies are essential. Incorporating structured counseling sessions, visual educational tools, and simplified explanations into routine pre-anesthetic assessment may bridge the knowledge gap, reduce perioperative anxiety, and enhance overall patient satisfaction.

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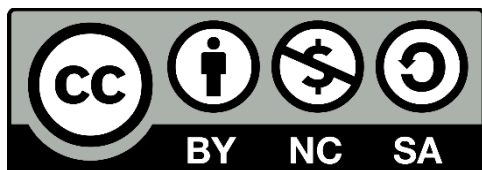
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