



Seek Wisdom, Elevate your Intellect and Serve Humanity

Addis Ababa University  
አዲስ አበባ ዩኒቨርሲቲ



ADDIS ABEBA UNIVERSITY

COLLEGE OF HEALTH SCIENCES

DEPARTMENT OF ANESTHESIOLOGY, CRITICAL CARE  
AND PAIN MEDICINE.

ASSESSMENT OF PATIENT SATISFACTION WITH PREOPERATIVE  
ANESTHETIC EVALUATION AND ASSOCIATED FACTORS AT TASH,  
ADDIS ABEBA, ETHIOPIA

BY Dr. Samrawit Regassa Kefene (ACCPM final year resident)

A RESEARCH THESIS SUBMITTED TO THE DEPARTMENT OF  
ANESTHESIA, COLLEGE OF HEALTH SCIENCES, ADDIS ABABA  
UNIVERSITY, FOR THE PARTIAL FULFILLMENT OF THE  
REQUIREMENT OF SPECIALTY CERTIFICATE OF ANESTHESIOLOGY,  
CRITICAL CARE AND PAIN MEDICINE.

MAY, 2025

ADDIS ABEBA, ETHIOPIA

<b>Name of investigator</b>	SAMRAWIT REGASSA KEFENE
<b>Full Title of the Research Paper</b>	ASSESSMENT OF PATIENT SATISFACTION WITH PREOPERATIVE ANESTHETIC EVALUATION AND ASSOCIATED FACTORS AMONG SURGICAL PATIENTS AT TASH, ADDIS ABABA, ETHIOPIA
<b>Total Cost of the project</b>	22,248.5 ETB
<b>Source(s) of Funding</b>	AAU
<b>Address of investigator</b>	+251935435865
	<a href="mailto:Samrirege101@gmail.com">Samrirege101@gmail.com</a>
	P.O.BOX: 1000 Addis Abeba
<b>Name of Advisor(s)</b>	Dr. Blen Ayele
	Phone no. +25123518889
	Email <a href="mailto:blenque5@gmail.com">blenque5@gmail.com</a>

## **Declaration of the investigator**

In partial fulfillment of the requirements for the Specialty Certificate in Anesthesiology, Critical Care, and Pain Medicine, I, Dr. Samrawit Regassa, hereby declare that this thesis is my original work entitled Assessment of patient satisfaction with preoperative anesthesia evaluation and associated actors among elective surgical patients at Tikur Anbessa specialized Hospital, Addis Ababa, Ethiopia. The study was conducted between December 1, 2024, and March 30, 2025, as outlined in the methodology section of this thesis.

Name of student

Date

Signature

Approval of First Advisor

Name of First Advisor Dr. Blen Ayele

Date

Signature

Approval of Secondary Advisor

Name of Secondary Advisor

Date

Signature

## **AKNOWLEDGMENT**

The knowledge, experience, and skills I gained from conducting this research were highly life time rewarding for me. For this, I would like to express my gratitude to my advisors Dr. Blen Ayele.

I would like to thank TASH, Operating Room staff who collaborated in giving me the preliminary information necessary to prepare this document.

I would also like to thank the Department of ACCPM, School of Medicine, College of Health Sciences, Addis Abeba University, for giving me this great opportunity to perform my study.

## CONTENTS

AKNOWLEDGMENT .....	3
ABBREVIATIONS .....	7
ABSTRACT .....	8
CHAPTER ONE: INTRODUCTION .....	9
1.1 BACKGROUND .....	9
1.2 STATEMENT OF THE PROBLEM .....	12
1.3 SIGNIFICANCE OF THE STUDY .....	14
CHAPTER TWO: LITERATURE REVIEW .....	16
2.1 Overview of Patient Satisfaction in Healthcare .....	16
2.2 Patient Satisfaction with Pre-Anesthetic Evaluations .....	18
2.3 Associated Factors Influencing Patient Satisfaction in Pre-Anesthetic Evaluations ....	21
2.4 CONCEPTUAL FRAMEWORK .....	26
CHAPTER THREE: OBJECTIVE .....	27
3.1 GENERAL OBJECTIVE .....	27
3.2 SPECIFIC OBJECTIVE .....	27
CHAPTER FOUR: METHODS .....	28
4.1 STUDY SETTING .....	28
4.2 STUDY DESIGN .....	28
4.3 POPULATION .....	28
4.4 ELIGIBILITY CRITERIA .....	28
4.5 SAMPLE SIZE DETERMINATION AND PROCEDURE .....	29
4.6 STUDY VARIABLES .....	29
4.7 OPERATIONAL DEFINITIONS .....	30
4.8 DATA COLLECTION METHODS .....	30
4.9 DATA QUALITY MANAGEMENT .....	30
4.10 DATA ANALYSIS .....	30
4.11 ETHICAL CONSIDERATION .....	31
4.12 DISSEMINATION OF RESULT .....	31
CHAPTER FIVE: RESULT .....	32
5.1 BASELINE SOCIO-DEMOGRAPHIC CHARACTERSTICS .....	32
5.2 ASA AND COMORBIDITIES .....	32
5.3 PREOPERATIVE ANESTHETIC EVALUATION .....	34
CHAPTER SIX: DISCUSSION .....	37

CHAPTER SEVEN: CONCLUSION AND RECOMMENDATION.....	39
REFERENCES.....	40
ANNEXES .....	42
ANNEX I: CONSENT FORM .....	42
ANNEX II: QUESTIONNAIRE.....	43

## **ABBREVIATIONS**

PAE: Pre anesthetic Evaluation

ASA: American Society of Anesthesiologists

## **ABSTRACT**

**Background:** Patient satisfaction with preoperative anesthesia care is a key indicator of healthcare quality, influencing both patient experience and outcomes. In Ethiopia, limited evidence exists on the level of patient satisfaction with preoperative anesthetic evaluation, especially at Tikur Anbessa Specialized Hospital (TASH).

**Objective:** To assess patient satisfaction with preoperative anesthesia care and identify associated factors among elective surgical patients at TASH.

### **Methods:**

A hospital-based cross-sectional study was conducted among 331 patients undergoing elective surgery at TASH. Data were collected using a structured questionnaire covering socio-demographic data, clinical history, type of surgery, and perceptions of anesthetic care. Satisfaction was assessed and associated factors analyzed using descriptive statistics and binary logistic regression.

### **Results:**

The overall satisfaction rate was 85%. Significant factors associated with satisfaction included perceived cleanliness of the preoperative clinic ( $p = 0.042$ ), punctuality and availability of the anesthesia provider ( $p = 0.037$ ), and adequacy of fasting instruction ( $p = 0.017$ ). Educational level, ASA classification, and prior surgical history were not significantly associated.

### **Conclusion:**

High patient satisfaction was reported with preoperative anesthetic evaluation. Interpersonal and environmental factors—such as communication, provider behavior, and clinic cleanliness—played a critical role in shaping patient perceptions. Enhancing these areas could further improve patient-centered care.

**Keywords:** Patient satisfaction, anesthesia care, preoperative evaluation, Tikur Anbessa Hospital, Ethiopia

# **CHAPTER ONE: INTRODUCTION**

## **1.1 BACKGROUND**

Preoperative anesthetic evaluation plays a pivotal role in ensuring patient safety and optimizing surgical outcomes. This evaluation allows the anesthesiologist to comprehensively assess the patient's overall health status, past medical history, and specific needs related to the upcoming surgery. By doing so, the anesthesiologist can identify potential risks, select the most appropriate anesthetic technique, and plan for effective perioperative management, including the mitigation of potential complications such as postoperative pain, nausea, and vomiting (1, 2).

One of the primary benefits of preoperative evaluation is the reduction of patient anxiety. By meeting with the anesthesiologist prior to surgery, patients have the opportunity to discuss their concerns, learn about the anesthesia process, and gain confidence in the care they will receive (3). This interaction not only helps alleviate fears but also fosters trust between the patient and the anesthesiologist, which is crucial for a positive surgical experience (4).

Moreover, preoperative anesthetic evaluation contributes to the minimization of surgical cancellations. By thoroughly assessing the patient beforehand, the anesthetist can address any medical issues that might otherwise lead to last-minute cancellations, thus improving the efficiency of surgical scheduling and resource utilization (5).

The preoperative evaluation also enhances communication among healthcare professionals. It ensures that all members of the surgical team are informed about the patient's condition, leading to better coordination and continuity of care (6). This collaborative approach reduces the likelihood of complications and improves overall patient outcomes (7).

A typical anesthetic evaluation comprises several critical components to ensure patient safety and optimal surgical outcomes. Firstly, a thorough review of the patient's medical history is conducted, focusing on existing medical conditions, current medications, prior anesthetic experiences, and any known allergies. This detailed history helps identify potential risks associated with anesthesia (3). Following this, a physical examination is performed to assess the patient's overall health status and detect any abnormalities that may impact anesthetic

management (8). Finally, the anesthetist discusses the anesthetic plan with the patient, including the techniques to be used, options for postoperative pain management, and any potential complications. This discussion not only informs the patient but also involves them in the decision-making process, ensuring informed consent and fostering trust between the patient and the healthcare team (4).

Patient satisfaction is defined as the degree to which a patient's expectations regarding healthcare services are met, making it a subjective and multifaceted concept influenced by individual beliefs, experiences, and socio-demographic factors (9). It serves as a critical indicator of healthcare quality, reflecting the effectiveness of clinical care and the efficiency of healthcare delivery. Patient satisfaction is essential for identifying gaps in care, guiding improvements, and fostering patient-centered care (1). High levels of patient satisfaction have been linked to better patient outcomes, including improved adherence to treatment plans and lower readmission rates (10).

Moreover, patient satisfaction is increasingly recognized as a key metric in quality management systems, offering unique insights into the patient's perspective, which may differ from clinical assessments. For instance, while healthcare providers might prioritize technical outcomes, patients often value communication, information, and emotional support more (11). Thus, measuring and understanding patient satisfaction can lead to enhanced healthcare services, ultimately improving the overall patient experience and outcomes. The role of patient satisfaction extends beyond individual patient care; it is also becoming integral to hospital accreditation and reimbursement processes, highlighting its importance as a tool for continuous quality improvement (12).

"Patient satisfaction plays a pivotal role in influencing patient compliance, clinical outcomes, and the overall healthcare experience. When patients are satisfied with the care they receive, they are more likely to comply with prescribed treatments, attend follow-up appointments, and engage in healthy behaviors (10). This increased compliance directly impacts clinical outcomes, as adherence to medical advice is crucial for the effectiveness of treatments. For instance, in anesthesia, patient satisfaction with preoperative visits can enhance trust and cooperation, leading to better management of postoperative complications (1).

Moreover, patient satisfaction serves as an essential feedback mechanism for healthcare providers. By assessing satisfaction levels, providers can identify gaps in care delivery, such as issues with communication or unmet patient expectations, and take corrective actions to improve service quality (13). This process not only improves individual patient experiences but also contributes to the continuous quality improvement of healthcare systems as a whole (12).

In the context of the growing trend of health consumerism, where patients act as consumers in a competitive healthcare marketplace, high patient satisfaction is increasingly seen as a critical outcome measure (14). Healthcare institutions that prioritize patient satisfaction are more likely to attract and retain patients, as satisfied patients are more likely to recommend the service to others and remain loyal to their providers (9). Consequently, patient satisfaction is not just a measure of care quality but also a strategic tool for healthcare providers to enhance patient engagement, improve clinical outcomes, and succeed in a competitive healthcare environment.

## **1.2 STATEMENT OF THE PROBLEM**

Despite the growing recognition of patient satisfaction as a critical measure of healthcare quality, there remain significant gaps in our understanding of patient satisfaction with preoperative anesthetic evaluations. One of the primary challenges lies in the subjective nature of patient satisfaction, which is influenced by numerous factors, including socioeconomic status, demographic characteristics, cultural background, personal preferences, cognitive abilities, and previous healthcare experiences. These diverse influences make it challenging to standardize measurements across different patient populations, leading to inconsistent findings in the literature (9).

A significant gap is the lack of comprehensive data on patient satisfaction in specific contexts, particularly in low-income countries. While studies have been conducted, they often report widely varying levels of satisfaction, ranging from 56.5% to 99.1%. This wide range suggests that patient satisfaction is not consistently assessed or reported, and may reflect differences in study design, measurement tools, and patient populations. For example, in Ethiopia, the use of the Leiden preoperative care patient satisfaction tool has highlighted that satisfaction levels may be below standard, indicating a need for further investigation (11).

Another issue is the limited focus on preoperative anesthetic evaluations specifically. Much of the existing literature on patient satisfaction in anesthesia focuses on broader perioperative experiences, which encompass the entire surgical journey rather than isolating the preoperative assessment. This lack of focus on the preoperative period is problematic because it is during this time that interactions with healthcare providers play a key role in reducing patient anxiety, assessing perioperative requirements, and communicating vital information (8).

Furthermore, there is a notable deficiency in the development and application of robust tools to accurately capture the nuances of patient satisfaction, particularly in the preoperative setting. Existing tools may not fully account for the complex interplay of factors that influence satisfaction, such as the quality of communication between anesthesiologist and patients, the adequacy of information provided, and the management of perioperative

symptoms like nausea and pain. This gap in measurement tools hinders the ability to develop targeted interventions that could improve patient experiences (12).

Additionally, the literature lacks detailed data on the specific determinants of patient satisfaction within the context of preoperative anesthetic evaluations. While general factors such as communication skills, the adequacy of information provided, and the management of perioperative symptoms are recognized, there is little information on how these factors interact and influence patient satisfaction. This lack of detailed data limits the development of evidence-based strategies to enhance patient satisfaction (15).

Lastly, there is a gap in understanding the broader implications of patient satisfaction with preoperative anesthetic evaluations on clinical outcomes. While patient satisfaction is increasingly recognized as a key quality indicator, its direct impact on outcomes such as postoperative recovery, patient compliance, and long-term health is not well documented. Addressing these gaps could lead to more effective strategies for improving both patient satisfaction and overall healthcare quality in preoperative settings (10).

In conclusion, while patient satisfaction is acknowledged as an important aspect of healthcare quality, the existing knowledge about patient satisfaction with preoperative anesthetic evaluations remains limited. There is a need for more focused research, particularly in low-income settings, to better understand the factors that influence patient satisfaction and how it impacts clinical outcomes. Developing more comprehensive tools and methodologies for assessing patient satisfaction in this specific context is essential for improving the quality of care and enhancing patient experiences.

It is crucial to assess patient satisfaction with preoperative anesthetic evaluations at Tikur Anbesa Hospital because no previous studies have been conducted to determine the level of satisfaction among patients in this specific context. By evaluating patient satisfaction, the hospital can identify areas for improvement in the quality of anesthesia services, ensuring that patient care meets both clinical standards and patient expectations. This study will provide valuable insights that can guide the hospital in enhancing its services, ultimately leading to better patient outcomes and increased trust in the healthcare system.

### **1.3 SIGNIFICANCE OF THE STUDY**

Evaluating patient satisfaction is crucial because it reflects patients' perceptions of their healthcare experiences, particularly in high-stress situations like preoperative assessments. Patients value clear communication, the quality of medical explanations, the opportunity to ask questions, and the support and respect shown by healthcare staff. When these aspects are addressed, it can alleviate anxiety, enhance trust, and improve overall patient well-being. Understanding patient satisfaction helps healthcare providers tailor their services to better meet patient needs and expectations, ultimately leading to more positive healthcare experiences and outcomes.

For healthcare providers, assessing patient satisfaction serves as a vital feedback mechanism. It offers insights into the effectiveness of their communication, bedside manner, and overall care delivery. Patient satisfaction can reflect various aspects of care, including the provider's ability to address patient concerns, participate in shared decision-making, and provide timely and efficient care. This feedback is essential for continuous quality improvement, enabling providers to identify areas for enhancement and to refine their practices to better meet patient expectations. Additionally, high levels of patient satisfaction can enhance the reputation of healthcare providers, making them more attractive to prospective patients in a competitive healthcare market.

Within the broader healthcare system, patient satisfaction is increasingly recognized as a key indicator of quality. It is used by consumers, and regulatory bodies to assess and compare healthcare providers and institutions. By systematically measuring and addressing patient satisfaction, healthcare systems can identify and correct inefficiencies and gaps in care delivery. Furthermore, patient satisfaction is becoming a primary outcome measure, influencing how healthcare resources are allocated and how services are delivered. Ensuring high levels of satisfaction can make public health services more responsive to the needs and expectations of the population, ultimately leading to better health outcomes and a more efficient healthcare system.

Thus, this study is conducted with the aim to determine the level of patient satisfaction with the preoperative anesthetic evaluation provided in our institution and identify associated factors to improve patient care and experience.

## **CHAPTER TWO: LITERATURE REVIEW**

### **2.1 Overview of Patient Satisfaction in Healthcare**

Patient satisfaction is a critical component in assessing and improving the quality of healthcare services, particularly in the context of perioperative anesthesia. It serves as a valuable indicator of care quality, focusing on patient interactions with anesthesiologist, management during procedures, and postoperative follow-up (11). By capturing patients' perceptions and experiences, satisfaction surveys provide insights into the effectiveness of care and highlight areas needing improvement. These evaluations are crucial for developing standards and enhancing care delivery (16).

The integration of patient satisfaction into quality improvement efforts allows healthcare providers to address service gaps and refine practices based on patient feedback. This feedback can reveal strengths and weaknesses in care delivery, impact clinical outcomes, and influence patient behaviors such as adherence to treatment and follow-up appointments (17). Overall, patient satisfaction is an essential measure for evaluating and advancing healthcare quality, ensuring that care is both effective and responsive to patients' needs (11, 18)).

The significance of patient satisfaction lies in its role as a key outcome measure in healthcare. Unlike clinical endpoints such as mortality or morbidity, patient satisfaction offers a broader perspective on healthcare quality by encompassing the entire patient experience. This includes not only the clinical outcomes but also the interpersonal aspects of care, such as communication, empathy, and the provision of information (6). Hepner et. al. stated that patient satisfaction could be more insightful than other clinical outcomes, as it captures the subjective experience of care, which may not be fully reflected in traditional clinical measures (8).

Moreover, patient satisfaction has broader implications for healthcare organizations. High levels of satisfaction are associated with better patient compliance, improved health outcomes, and increased patient loyalty. Conversely, dissatisfaction can highlight areas of care that require improvement, providing valuable feedback for healthcare providers and policymakers to enhance service quality (12). Additionally, as healthcare systems increasingly move towards value-based care models, patient satisfaction is expected to play a

more significant role in determining reimbursement rates, thereby directly influencing the financial viability of healthcare institutions (11).

Patient satisfaction has become a crucial aspect of healthcare quality assessment over the decades. Initially, healthcare focused primarily on clinical outcomes, with little attention given to the patient experience. In the 1960s, patient satisfaction gained importance as a key indicator of care quality (15). Early methods of assessing satisfaction were informal and lacked consistency, failing to capture the full range of factors influencing patient experiences, such as emotional and cultural dimensions (15, 19). As healthcare systems evolved and patient-centered care became a priority, the need for systematic and reliable assessment methods became clear. This led to the development of standardized surveys and feedback mechanisms, enabling healthcare providers to identify areas of dissatisfaction and make targeted improvements. These advancements have significantly contributed to enhancing overall care quality by incorporating the patient's perspective into healthcare evaluations (20).

In recent years, patient satisfaction has become a critical performance indicator in healthcare, influencing everything from hospital rankings to reimbursement rates (19). This evolution underscores the increasing importance of continuous monitoring and improvement of patient satisfaction as a means of improving healthcare outcomes. The contemporary approach to patient satisfaction is holistic, recognizing that patients are not merely passive recipients of care but active participants in their healthcare journey (10). This perspective aligns with the broader trend toward patient-centered care, where healthcare decisions are increasingly made in collaboration with patients, based on their preferences and values, alongside the best available evidence.

Patient satisfaction in healthcare is a multifaceted concept influenced by various determinants, which can be broadly categorized into patient-related characteristics, healthcare provider-related factors, the physical environment, and organizational attributes.

**Patient-Related Characteristics:** Age and gender are significant predictors of patient satisfaction. Middle-aged patients generally report higher satisfaction compared to younger and older individuals. This trend suggests that age-related expectations and health needs

influence satisfaction levels (21). Gender also plays a role, with some studies indicating that female patients report higher satisfaction, although this is not universally observed (9). Educational background is another determinant, with higher education levels often correlating with lower satisfaction, possibly due to higher expectations (21).

**Healthcare Provider-Related Factors:** The technical competence of healthcare providers and their interpersonal skills significantly impact patient satisfaction. Patients value not only the clinical expertise of providers but also their ability to communicate effectively, show empathy, and involve patients in decision-making. Studies suggest that when healthcare providers take the time to understand patient concerns and explain conditions clearly, patient satisfaction increases (22). Additionally, patients prefer providers who acknowledge the importance of their social and mental well-being alongside their physical health.

**Physical Environment and Organizational Attributes:** The physical environment of healthcare facilities, including cleanliness, comfort, and noise levels, contributes to patient satisfaction. Well-maintained environments enhance the overall patient experience (17). Organizational characteristics, such as the reputation of the healthcare facility, administrative efficiency, and the availability of resources, also play a crucial role. Continuity of care, where patients receive ongoing care from the same provider, is particularly valued by older patients, further enhancing satisfaction (17).

Understanding these determinants is essential for healthcare providers to improve patient satisfaction and the quality of care delivered.

## **2.2 Patient Satisfaction with Pre-Anesthetic Evaluations**

Preoperative anesthetic evaluation (PAE) is a critical component of the perioperative process, aimed at ensuring patient safety, optimizing surgical outcomes, and enhancing overall healthcare efficiency. Conducted by an anesthesiologist, PAE provides a comprehensive assessment of a patient's medical condition, past anesthetic history, and potential risks associated with the planned anesthesia and surgery.

The primary purpose of PAE is to evaluate the patient's current health status, including any comorbidities that could influence the choice of anesthesia or surgical approach. This

evaluation involves a detailed review of the patient's medical history, including previous adverse reactions to anesthesia, ongoing medications, and any chronic health conditions. By understanding the patient's health profile, the anesthesiologist can develop a tailored anesthetic plan that minimizes risks and addresses potential complications (2).

Moreover, Preoperative anesthetic evaluations (PAE) are crucial for patient education and communication, where anesthesiologists discuss anesthesia options, risks, benefits, and perioperative pain management strategies. This interaction reduces patient anxiety and ensures informed consent (4). PAE also enhances surgical efficiency by identifying and addressing potential issues before surgery, reducing delays and cancellations, and optimizing operating room utilization. Furthermore, it fosters better coordination among healthcare providers, ensuring continuity of care throughout the surgical process (1).

The role of anesthesiologists in preoperative evaluation is pivotal to ensuring the safety and well-being of patients undergoing surgery while being involved in both preoperative and postoperative care. Anesthesiologists are responsible for conducting a comprehensive review of the patient's medical history, including any previous experiences with anesthesia and ongoing medical treatments. This thorough evaluation allows them to assess the patient's overall health and identify any factors that could influence perioperative risk. By performing a focused physical examination, anesthesiologists can pinpoint specific aspects of the patient's condition that may require special attention during surgery (15).

Anesthesiologists play a crucial role in preoperative evaluations by developing detailed anesthetic plans based on the patient's medical history, physical examination, and preoperative tests. They also manage preoperative medications and ensure informed consent by explaining the risks, benefits, and alternatives of anesthesia (15). Beyond these technical aspects, anesthesiologists build trust and rapport with patients by addressing their concerns and explaining the anesthetic plan. This helps alleviate anxiety and fosters a sense of security, contributing to a positive surgical experience (21).

Common practices and protocols in preoperative anesthetic assessments are designed to ensure patient safety, optimize surgical outcomes, and enhance the overall efficiency of perioperative care. These practices typically involve a thorough evaluation of the patient's

medical history, physical condition, and potential risk factors associated with anesthesia and surgery.

The roles in preoperative assessment are often divided among various healthcare providers. Nurse practitioners and physician assistants typically conduct the initial history and physical (H&P) examinations for surgical patients across different specialties, such as neurosurgery, urology, and orthopedic surgery. Anesthesia providers, however, perform a separate, focused assessment to determine the need for additional testing or consultations, ensuring a comprehensive understanding of the patient's condition before surgery (8).

In some hospitals, such as the Avissawella Base Hospital, anesthetists meet with patients the day before surgery to conduct in-depth interviews and physical examinations. This practice allows for the collection of detailed medical histories, including prior anesthesia exposure and any known allergies. Anesthetists document their findings and, if necessary, consult with senior colleagues to optimize the patient's condition and order further investigations if needed (3). These protocols underscore the importance of thorough preoperative assessments in minimizing perioperative risks and enhancing patient outcomes.

In preoperative anesthetic evaluation, patient satisfaction serves as a key indicator of healthcare quality, reflecting various dimensions of patient care, including compassionate bedside manner, timely attention to needs, active participation in decision-making, and the provision of clear and adequate information (4). The preoperative visit by the anesthetist is a particularly critical moment that can significantly impact patient satisfaction. This interaction offers an opportunity for healthcare providers to address patient concerns, manage expectations, and build trust, which are essential for ensuring a positive patient experience.

Patient satisfaction in preoperative anesthetic evaluations, is a complex and subjective concept influenced by individual expectations, past experiences, and personal beliefs. Satisfaction results from comparing these expectations with perceived outcomes, where factors like anesthetist-patient interaction, information adequacy, and postoperative symptom management significantly affect satisfaction levels. Despite experiencing pain, patients may report high satisfaction if their broader expectations are met, underscoring the importance of both technical care quality and interpersonal dynamics in shaping satisfaction (9, 11).

### **2.3 Associated Factors Influencing Patient Satisfaction in Pre-Anesthetic Evaluations**

Patient satisfaction in preoperative settings is influenced by a variety of factors that can be categorized into patient-related, surgery-related, and healthcare-related factors.

Understanding these determinants is crucial for improving patient experiences and outcomes.

Several patient-specific factors play a role in preoperative satisfaction. Age, gender, and education level significantly impact patient satisfaction. Younger patients, women, and those with higher education levels tend to report lower satisfaction, which may be attributed to higher expectations or greater awareness of healthcare processes (1). Anxiety and depression also negatively affect satisfaction, as patients experiencing these conditions often report dissatisfaction with medical care. Conversely, patients who perceive themselves in good health generally report higher satisfaction (9). The relationship between the American Society of Anesthesiologists (ASA) classification and satisfaction is less clear, with mixed results in studies (10).

The nature of the surgery itself—its type, extent, and duration—can influence patient satisfaction. Patients undergoing minor or shorter procedures typically report higher satisfaction compared to those undergoing major or prolonged surgeries. The type of anesthesia used, whether regional, deep sedation, or general, can also affect satisfaction. Adverse anesthetic outcomes and postoperative complications are strong predictors of dissatisfaction (9).

Healthcare-related factors encompass both center-specific and general factors. Center-specific factors include the quality of preoperative consultations and the effectiveness of communication. Positive interactions, including empathetic communication and adequate information provision, significantly enhance patient satisfaction (8). For instance, longer consultation times, allowing patients to discuss their concerns thoroughly, and efficient management of waiting times contribute to higher satisfaction levels (14).

General healthcare factors, such as the broader economic and financial context, also influence patient satisfaction. Patients in taxpayer-funded healthcare systems often have

different expectations compared to those in private insurance systems, affecting their overall satisfaction with care (1).

Communication, information sharing, and patient involvement are critical factors influencing patient satisfaction in preoperative settings. Effective communication and comprehensive information provision are central to enhancing patient experiences and alleviating concerns.

Clear and empathetic communication significantly impacts patient satisfaction.

Anesthesiologists who provide detailed explanations about anesthesia, address patient concerns, and involve patients in decision-making tend to foster higher satisfaction levels (9, 13). The quality of interaction, including the tone of voice, choice of words, and empathetic behavior, plays a crucial role in shaping patients' perceptions of care (10). Techniques such as the BATHE method, which focuses on background, affect, trouble, handling, and empathy, have been shown to enhance the quality of consultations and boost patient satisfaction (10).

Involving patients in their care and decision-making process helps to mitigate anxiety and improve satisfaction. Patients who are well-informed about the type of anesthesia, the procedure, and potential risks are generally more comfortable and satisfied (7). The frequency and quality of postoperative visits also contribute to satisfaction, as these visits provide opportunities for further communication and reassurance (9).

Inadequate communication and insufficient information can lead to increased preoperative anxiety and dissatisfaction. For example, failure to adequately inform patients about anesthesia options and the nature of the procedure can heighten anxiety and dissatisfaction (4).

The study of patient satisfaction with preoperative anesthetic evaluations reveals varied outcomes across different regions and healthcare settings, reflecting the influence of local factors such as healthcare infrastructure, communication practices, and socio-economic conditions.

In Greece, a study involving 370 patients found that patient satisfaction with anesthesia and pain management was generally high. Most patients, whether they underwent general or

regional anesthesia, expressed a strong likelihood of choosing the same anesthesia regimen again. Satisfaction was notably influenced by effective communication with the anesthesiologist, patient age, and some dissatisfaction arose from procedural delays (13).

Similarly, in Germany, a study found nearly universal satisfaction with preoperative anesthetic evaluations, with 98.9% of participants expressing positive feedback. The study compared satisfaction levels between consultations by residents and consultants, finding no significant differences in overall satisfaction, though residents were slightly favored for consultation quality and friendliness. The study emphasized the importance of empathy, communication, and organizational efficiency in achieving high patient satisfaction, with both groups performing well in these areas (10).

In contrast, a study in Sudan highlighted significant dissatisfaction with preoperative anesthesia facilities, particularly concerning cleanliness, seating availability, and the ease of locating the clinic. Only 20% of patients reported satisfaction, a stark contrast to higher satisfaction rates in studies from other regions. The low satisfaction was attributed to Sudan's poor economic situation, resource distribution challenges, and political instability, underscoring the impact of broader socio-economic factors on healthcare quality (15).

In Ethiopia, studies conducted at Menilik Hospital and the University of Gondar referral hospital revealed varying levels of patient satisfaction. At Menilik Hospital, 72.3% of patients were satisfied with their preoperative evaluations, with satisfaction influenced by factors such as age, income, and the information provided about anesthesia. In contrast, the University of Gondar study reported lower overall satisfaction at 64.7%, with significant dissatisfaction related to the lack of adequate information about anesthesia and postoperative care. Both studies underscored the importance of clear communication and thorough information provision in enhancing patient satisfaction (1, 4).

In Nepal, a study involving 370 participants reported a high overall satisfaction rate of 84.05% with pre-anesthetic consultations. Satisfaction was particularly high among younger patients and those with higher education levels. However, the study also identified areas for improvement, especially in communicating details about postoperative analgesia and nausea/vomiting management, where satisfaction rates were notably lower (7).

Lastly, in Sri Lanka, studies revealed that while a majority of patients were moderately satisfied with their preoperative anesthetic visits, significant gaps remained in areas such as the adequacy of time allocated for consultations and the thoroughness of explanations provided. Satisfaction varied, with patients undergoing major surgeries generally reporting lower satisfaction levels compared to those with minor surgeries. The studies highlighted the need for improved communication and more personalized care to enhance patient satisfaction (3, 5).

Overall, these studies collectively underscore the critical role of effective communication, empathy, and organizational efficiency in achieving high patient satisfaction with preoperative anesthetic evaluations. While satisfaction levels are generally high in well-resourced settings, significant challenges remain in regions with less developed healthcare infrastructure, where socio-economic and logistical factors heavily influence patient experiences.

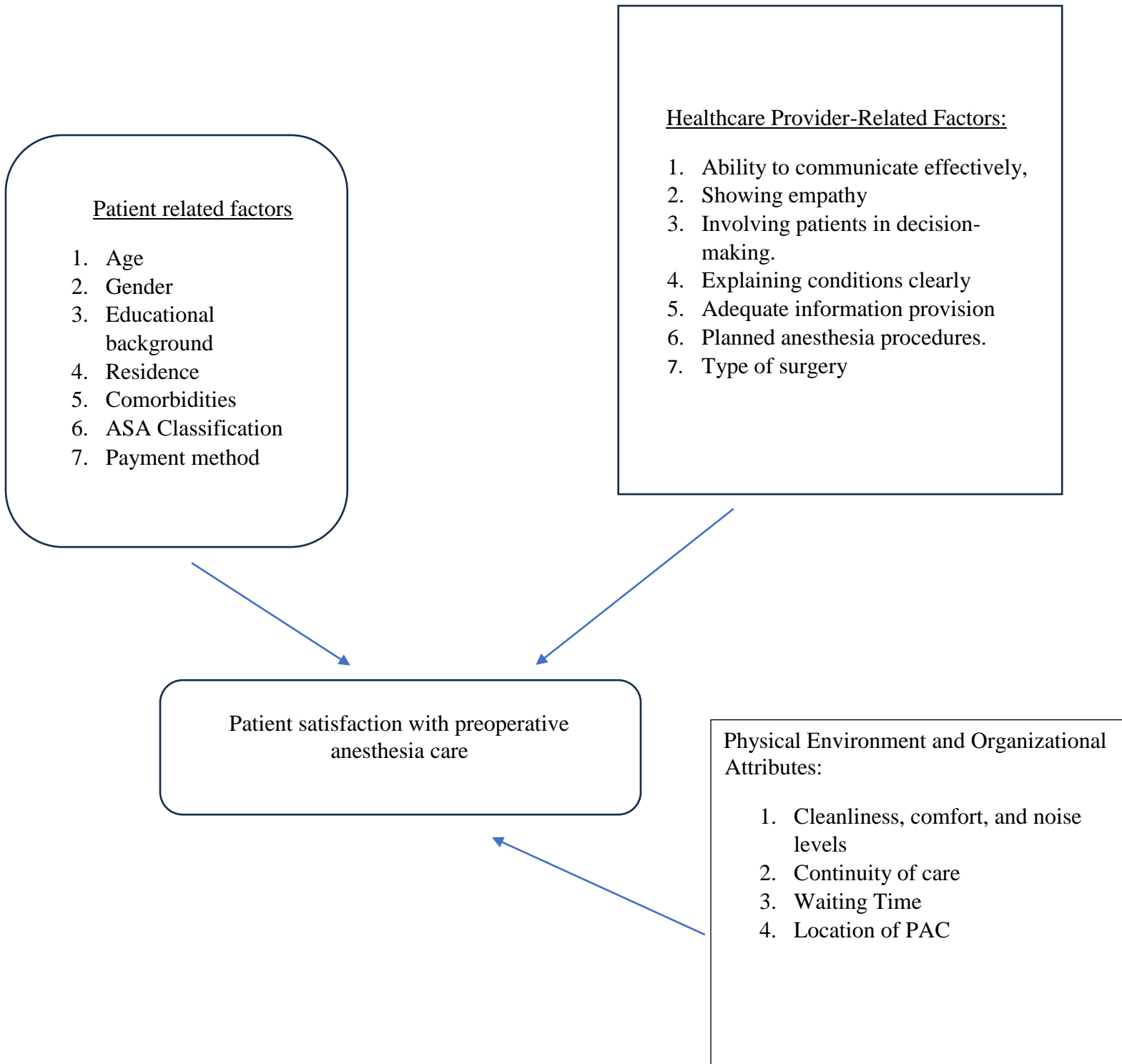
In low-income countries like Ethiopia, there is a lack of comprehensive studies that explore the specific factors affecting patient satisfaction in low-resource settings. These factors may include inadequate healthcare facilities, limited access to trained anesthetists, and poor communication between healthcare providers and patients. Additionally, there is insufficient research on the impact of socio-economic and cultural factors on patient satisfaction in these regions. For instance, the influence of patients' educational levels, income, and access to healthcare information on their satisfaction with preoperative care is underexplored.

Moreover, there is a need for studies that examine the role of healthcare system inefficiencies, such as long waiting times, overcrowding, and inadequate pain management, in shaping patient experiences. Addressing these gaps through targeted research could provide valuable insights into improving patient satisfaction with preoperative anesthetic evaluations in low-income countries, ultimately leading to better healthcare outcomes. Apparently, there is no study conducted at Tikur Anbesa Hospital to determine the level of patient satisfaction with preoperative anesthetic evaluations.

Patient satisfaction reflects the effectiveness of communication between patients and healthcare providers, the adequacy of preoperative preparation, and the overall patient

experience. Assessing patient satisfaction with preoperative anesthetic evaluations at Tikur Anbesa Hospital is crucial for improving healthcare quality and outcomes. Understanding patient satisfaction also can highlight strengths and identify gaps, particularly in communication, information provision, and facility conditions. As one of Ethiopia's largest teaching hospitals, Tikur Anbesa serves as a benchmark for healthcare delivery across the country. Evaluating patient satisfaction in this setting provides insights that can guide improvements at the hospital and inform national healthcare policies.

## 2.4 CONCEPTUAL FRAMEWORK



## **CHAPTER THREE: OBJECTIVE**

### **3.1 GENERAL OBJECTIVE**

- To determine the level of patient satisfaction with the preoperative anesthetic evaluation and associated factors in TASH.

### **3.2 SPECIFIC OBJECTIVE**

- To determine the level of patient satisfaction of patients who underwent surgery with the preoperative anesthetic evaluation from December-March 30 2024.
- To assess the factors associated with the level of patient satisfaction of patients who underwent surgery with the preoperative anesthetic evaluation from December-March 30 2024.

## **CHAPTER FOUR: METHODS**

### **4.1 STUDY SETTING**

The study is conducted at TASH, Addis Ababa, Ethiopia from September 2024 -March 30 2025 G.C. This is one of the oldest public hospitals in the country located in north east Addis Ababa in Yeka Kefleketema, which provides health services with a surgical bed capacity of 137 from the catchment population of about one million six hundred thousand people

The hospital is staffed with approximately 68 anesthesiology residents and 10 anesthesiologists.

According to the annual report of anesthesia department, 1900 patients were operated upon under anesthesia in 2015 E.C.

Study Period: December 1 2024-March 30, 2025 G.C.

### **4.2 STUDY DESIGN**

An Institution-based cross-sectional descriptive study was conducted.

### **4.3 POPULATION**

#### **4.3.1 Source population**

All surgical inpatients undergoing surgery during the study period.

#### **4.3.2 Study population**

Selected surgical inpatients undergoing elective surgery within the data collection period.

### **4.4 ELIGIBILITY CRITERIA**

#### **Inclusion Criteria:**

- Adult patients above 18 years old undergoing elective surgeries.

#### **Exclusion Criteria:**

- Very seriously ill patients without an attendant (due to difficulty in interviewing and obtaining consent).
- Patients under 18 years.
- Patients with cognitive dysfunction or any other inability to complete the interview.
- Patients admitted postoperatively to the intensive care unit.
- Patients discharged before 24 hours.
- Patients who did not complete the preoperative evaluation.

## 4.5 SAMPLE SIZE DETERMINATION AND PROCEDURE

### 4.5.1 Sample Size Determination

The sample size was estimated using the single population proportion formula. The overall satisfaction of patients with preoperative anesthetic evaluation from a study done in University of Gondar teaching and referral hospital was taken which is 64.7%. with a margin of error of 5% and 95% confidence interval, the sample size required for this study is 387 patients.

$$n = Z^2 p (1-p) / w^2$$

$$n=1.96^2(0.647(0.353))/0.0025 = 351$$

Where  $n$  = number of sample size

$Z_{\alpha/2}$  = Z score at 95% confidence interval  $Z=1.96$

$P$  = anticipated population proportion

$w$  = margin of error =0.05

Because the source population is <10,000, there is a need to use the population correction formula which is  $n = n_0 / 1 + (n_0)/N$ , where  $n_0$  = initial sample size= 351

$$n = 352$$

$$N = \text{source population} = 1900$$

This gives a sample of 352.

When 10% is added for non-response, the total sample size is 387.

### 4.5.2 Sampling Method

Among those whose age is past 18 years old undergoing elective surgeries during the study period, a total of 387 were selected by simple random sampling technique.

## 4.6 STUDY VARIABLES

Dependent

- Patient satisfaction (satisfied or dissatisfied)

Independent

1. Gender
2. Age
3. Educational Background
4. Marital status

5. residence
6. Comorbidities:
7. ASA Classification
8. Payment method
9. Type of Surgery
10. Previous surgery/anesthesia
11. Planned anesthesia evaluation

## **4.7 OPERATIONAL DEFINITIONS**

### **1. Major operation**

A major operation was defined as any invasive operative procedure in which a more extensive resection is performed, eg, a body cavity is entered, organs are removed, or normal anatomy is altered – in general, if a mesenchymal barrier was opened (pleural cavity, peritoneum, meninges).

### **2. Minor operation**

A minor operation was defined as any invasive operative procedure in which only skin or mucus membranes and connective tissue are resected, eg, vascular cutdown for catheter placement or implanting pumps in subcutaneous tissue.

## **4.8 DATA COLLECTION METHODS**

The patients were interviewed face-to-face 24 hours after operation using an anonymous questionnaire by resident. The questionnaire is initially prepared in English, then translated into Amharic, and back-translated to ensure consistency.

## **4.9 DATA QUALITY MANAGEMENT**

Data collectors were trained according to the language used for interviews. Completed questionnaires were reviewed daily to prevent data loss. Data accuracy was ensured by Close supervision and daily communication (including by telephone).

## **4.10 DATA ANALYSIS**

Data were entered, and cleaned using Kobo Toolkit, and then were exported to Excel and be coded and analyzed with SPSS version 25.

The mean, standard deviation (SD), and frequency of variables were calculated. The Chi-square test was used to assess the association between individual variables and patient satisfaction (satisfied or dissatisfied). Binary logistic regression analysis was conducted to control for potential confounding variables and to identify independent predictors of patient satisfaction. Statistical significance was established based on a p-value less than 0.05, with a 95% confidence interval for odds ratios (ORs).

#### **4.11 ETHICAL CONSIDERATION**

Ethical Clearance was obtained from Addis Ababa University College of Health Science Ethical Review Committee.

Permission was secured from TASH medical director's office. Written informed consent was obtained from participants after explaining the benefits and risks of the study. All participant information will be kept confidential.

#### **4.12 DISSEMINATION OF RESULT**

The result of the study will be presented to Addis abeba University, School of medicine. It will also be communicated to TASH, Addis abeba health bureau and other concerned bodies through report. Further efforts will be made to publish the findings on national or international peer reviewed journal.

## **CHAPTER FIVE: RESULT**

### **5.1 BASELINE SOCIO-DEMOGRAPHIC CHARACTERSTICS**

Three hundred eighty-seven consecutive patients over four months were originally enrolled in the study period. Of these, 0.52 % refused, 5.43 % were discharged before 24hr, 1.15 % were transferred to Surgical intensive care unit. Satisfaction was identified in 85% of patients at the time of preoperative evaluation.

Most of the respondents were in the age group of 29– 38 years (26.3%) and the mean age of the study subjects was  $41.03 \pm 14.79$  with minimum and maximum value 17 and 76 years respectively. 53.23%, of the participants were females and the rest 46.27 % were males, 66.2% were married and 52.2% live in rural area.

Regarding educational status, the largest proportion of patients had attended higher education (25.77%), followed by those who completed secondary school (21.13%). Additionally, 17.01% of patients were unable to read and write.

<b>Educational Level</b>		
	Frequency	%
Can read and write	58	15.9341
Can't read and write	61	16.7582
Higher Education	94	25.8242
Primary Education	74	20.3297
Secondary Education	77	21.1538
Total	364	100

The Majority of patients (49.25%) pay out of pocket while 47.76% had social health insurance. And we found only 1 patient who had private health insurance.

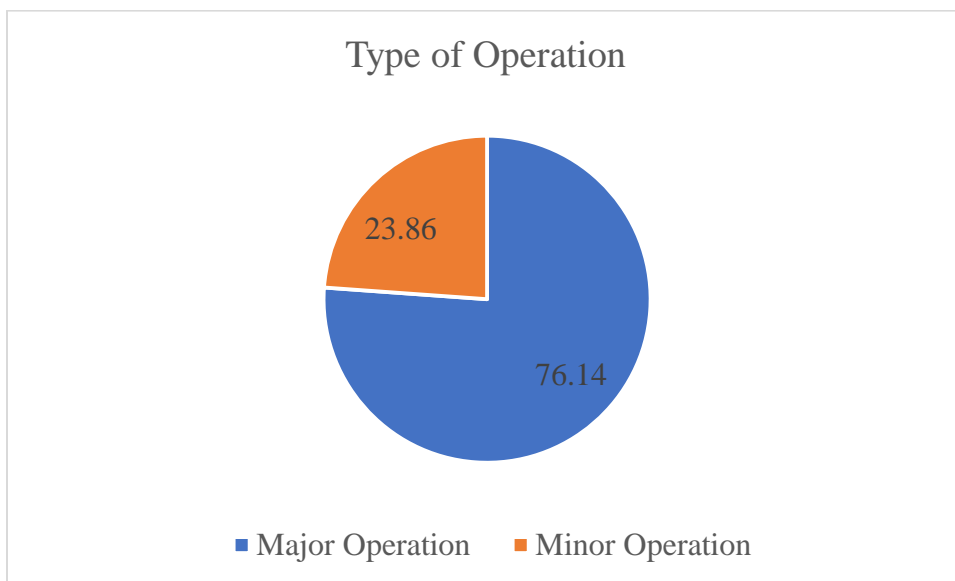
### **5.2 ASA CLASS AND COMORBIDITIES**

Of all the patients who were operated during the study period highest no. of patients were ASA2 (50.51%) followed by ASA1 (45.45%) and ASA3 (4.04%)

And 40.84% of patients had co-morbid illnesses of which Hypertension is the commonest (16.75%) followed by diabetes (9.42%).

Do you Have comorbid Illness		
	Frequency	%
No	227	62.3626
HTN	62	17.033
Diabetes Mellitus	35	9.61538
cardiac illness	18	4.94505
HIV	8	2.1978
CKD	8	2.1978
Asthma	4	1.0989
Psychiatric Illness	2	0.54945
Total	364	100

ASA Classification		
	Frequency	%
ASA 2	184	50.5495
ASA 3	14	3.84615
ASA I	166	45.6044
Total	364	100



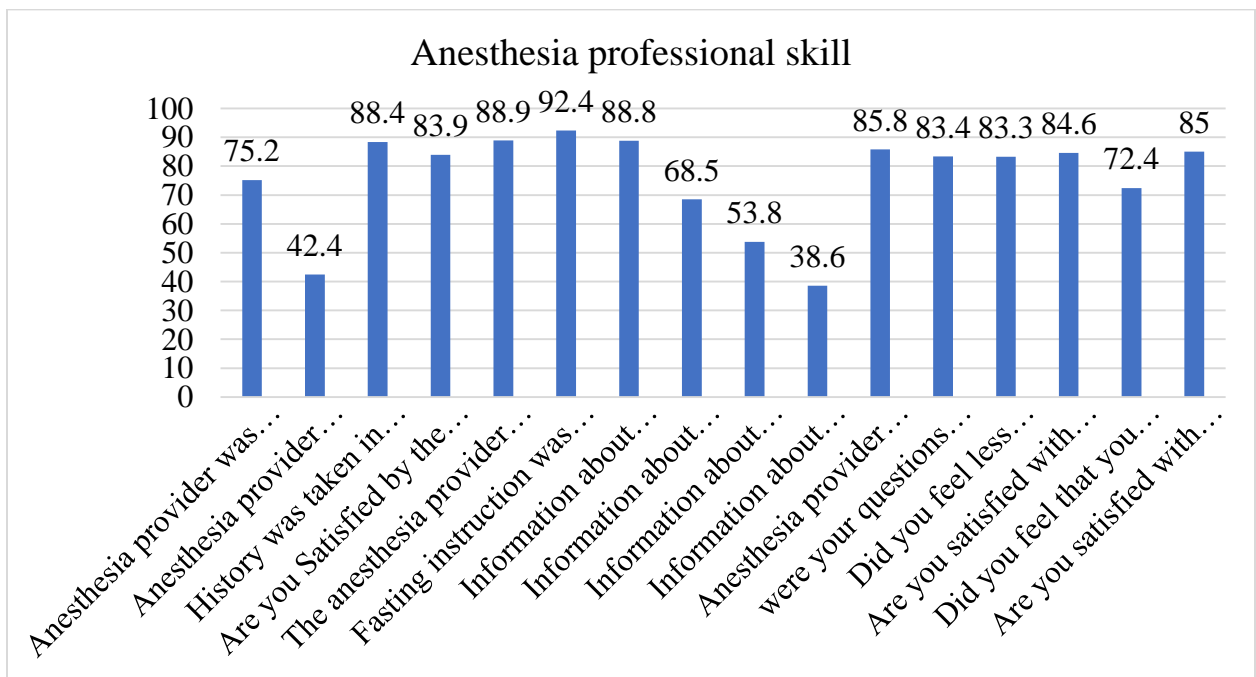
Among patients included in the study we found that 85% of the patients were satisfied with the Preoperative anesthetic visit. It is noted that 76.1% of patients undergone major surgery

and 42.7% of patients had previous surgery under anesthesia. The highest no. of patients had spinal anesthesia (52.53%) followed by general anesthesia (39.39%).

Type of Anesthesia		
	Frequency	%
Combined spinal epidural	11	3.02198
General Anesthesia	144	39.5604
Peripheral Nerve block	18	4.94505
Spinal Anesthesia	191	52.4725
Total	364	100

### 5.3 PREOPERATIVE ANESTHETIC EVALUATION

Out of all the patients in the study 53.2% of patients were first seen by anesthesia provider at the clinic. Regarding physical facility, 63.7 of these patients found the preop clinic neat, while only 24.6% of them considered the waiting chairs to be enough and 54.9 found the clinic location easy to find.



In the binary analysis, satisfaction level was associated with perceived neatness of the preoperative clinic (P =0.042, OR= 0.252 CI = [0.067, 0.951]), Anesthesia provider was

punctual and reachable (P =0.037, OR= 3.2 CI = [1.043, 9.865]), Fasting instruction was given adequately (P =0.017, OR= 0.140 CI = [0.028, 0.702]).

Binary Logistic Relation Analysis Table.

		SATISFIED	DISSATISFIED				
Characteristics	Response			P-Value	AOR	CI	
sex	MALE	153	16	0.049	2.28	0.99	5.26
	FEMALE	157	38				
Did you find the preoperative assessment area neat?	YES	122	11	0.042	0.252	0.067	0.951
	NO	62	17				
Preoperative clinic location is easy to find?	YES	106	9	0.025	3.988	1.185	13.415
	NO	73	20				
Anesthesia provider was punctual and Reachable?	YES	140	15	0.037	3.208	1.043	9.865
	NO	38	11				
Anesthesia provider introduced him/herself	YES	151	9	0	28.318	3.770	212.676
	NO	154	53				
History was taken in detail?	YES	304	15	0	459.250	54.803	3848.539
	NO	22	40				
Are you Satisfied by the Physical examination done?	YES	302	13	0	1162.000	125.249	10780.438
	NO	15	51				
The anesthesia provider considers your privacy during examination?	YES	300	22	0	61.875	18.054	212.057
	NO	13	33				
Fasting instruction was given adequate?	YES	286	46	0.017	0.14	0.028	0.72
	NO	18	13				

Information about anesthesia type was given adequate?	YES	300	18	0	165.000	33.731	807.117
	NO	11	36				
Information about postoperative complications was given adequate?	YES	238	13	0	23.653	7.753	72.160
	NO	66	47				
Information about postoperative analgesia was given adequate?	YES	191	11	0	46.667	6.197	351.424
	NO	115	51				
Information about PONV was given?	YES	137	15	0	23.641	3.147	177.621
	NO	167	53				
Anesthesia provider spent adequate time with you/patient?	YES	302	16	0	719.333	114.663	4512.715
	NO	13	47				
were your questions answered adequately?	YES	302	15	0	0.018	0.006	0.054
	NO	11	55				
Did you feel less anxious after anesthesia provider visit?	YES	300	16	0	0.018	0.006	0.055
	NO	15	55				
Are you satisfied with the communication from the anesthesia provider?	YES	298	9	0	4756.000	289.274	78194.055
	NO	11	53				
Did you feel that you were involved in the decision-making process regarding your anesthesia?	YES	258	11	0	0.155	0.109	0.220
	NO	47	51				

## **CHAPTER SIX: DISCUSSION**

This study aimed to assess patient satisfaction with the preoperative anesthetic evaluation and its associated factors at Tikur Anbessa Specialized Hospital (TASH), Addis Ababa, Ethiopia. Our findings reveal that 85% of patients were satisfied with the preoperative anesthetic evaluation. This level of satisfaction is comparable to findings from other Ethiopian studies such as the one done at Menelik II Referral Hospital, which reported a satisfaction rate of 88.6% (1), and the study in North Shewa that showed 88.5% satisfaction (11). However, our rate is slightly lower than the 91% reported in Ayder Comprehensive Specialized Hospital (21). Differences could be attributed to variations in institutional facilities, patient volume, and staff-patient interaction dynamics.

The demographic distribution of our participants showed a mean age of 41.03 years, and a slightly higher proportion of females (53.23%) compared to males (46.27%). Education status varied, with 25.77% having higher education and 17.01% unable to read and write. Similar demographic patterns were seen in studies conducted in Gonder (4) and Pakistan (2), suggesting the importance of considering literacy and socio-cultural factors when delivering preoperative information.

The study found that 53.2% of patients first met their anesthesia provider at the preoperative clinic. While this is encouraging, it is lower than the figure reported in Greek academic institutions where the majority of patients saw anesthesiologist earlier in the perioperative process (13). Early interaction has been shown to improve satisfaction due to reduced anxiety and increased trust in anesthetic care.

Three key factors were significantly associated with satisfaction: perceived neatness of the preoperative clinic, punctuality and availability of the anesthetist, and the provision of adequate fasting instructions.

Patients who found the clinic to be neat were significantly more likely to be satisfied (OR = 0.252,  $p = 0.042$ ). This finding aligns with study done at Menilik Hospital (15), who emphasized the role of clinic environment and cleanliness in shaping patient expectations and satisfaction. A well-organized and clean clinical environment signals professionalism and care quality to patients.

The availability and punctuality of the anesthesia provider also strongly influenced satisfaction (OR = 0.252,  $p = 0.037$ ). Similar associations were found in the study conducted in Nepal by Shrestha et al. (7), where delayed or absent anesthetists were among the top reasons for dissatisfaction. Likewise, Gupta and Gupta (6) from New Delhi highlighted that timely and respectful interactions by anesthetists enhance patient comfort and perceptions of safety.

In our study, the most significant predictor was the adequacy of fasting instruction (OR = 0.140,  $p = 0.017$ ). Patients who were not adequately informed about fasting were significantly more likely to be dissatisfied. This underscores findings by Ambulkar et al. (12) and Fetene et al. (11), both of whom noted that poor communication about preoperative instructions directly leads to patient frustration and reduced confidence in care.

Interestingly, factors such as sex, educational status, and ASA classification were not significantly associated with satisfaction in multivariate analysis. While some studies have found correlations between education and satisfaction (4), our findings suggest that the interpersonal and procedural aspects of care (i.e., communication, environment, provider behavior) play a more dominant role.

The relatively high proportion of patients who underwent spinal anesthesia (52.5%) and those who paid out-of-pocket (49.25%) reflects trends similar to other regional studies (21), suggesting financial and procedural standardization across major public institutions in Ethiopia.

Our study also highlighted gaps in facility infrastructure. For example, only 24.6% of patients felt the waiting chairs were sufficient. Though not directly linked to satisfaction in our regression model, physical discomfort in waiting areas can cumulatively influence a patient's overall experience. Kouki et al. emphasized that even small infrastructural inadequacies can undermine clinical excellence if patients perceive neglect.(13)

In general, the results of this study underscore that while clinical competence is essential, non-technical aspects such as environment, communication, and respectful behavior are equally critical to improving patient satisfaction.

## **CHAPTER SEVEN: CONCLUSION AND RECOMMENDATION**

### **Conclusion:**

The study found a high level of patient satisfaction (85%) with preoperative anesthetic evaluation at TASH. Key determinants of satisfaction were the cleanliness of the preoperative clinic, the punctuality and availability of anesthesia providers, and the adequacy of fasting instructions. These findings affirm that beyond clinical outcomes, factors related to communication, infrastructure, and provider professionalism significantly impact patient satisfaction.

### **Recommendations:**

**Enhance Provider Communication:** Anesthesia providers should prioritize delivering clear instructions, especially concerning fasting, and ensure they introduce themselves to patients during evaluations.

**Improve Clinic Environment:** Hospital administrators should address physical aspects such as cleanliness and seating availability to create a more patient-friendly environment.

**Ensure Timely Evaluation:** Efforts should be made to reduce delays in preoperative anesthetic consultations to build trust and reduce patient anxiety.

**Further Research:** Similar studies should be conducted in other public and private hospitals to generalize findings and explore satisfaction trends across diverse settings.

By focusing on both clinical and non-clinical factors, institutions can significantly improve the preoperative experience and overall patient satisfaction.

## **REFERENCES**

1. Obsa MS, Wahidi AM, Admas W, Woji BG. Assessment of Patient Satisfaction with Preoperative Anesthetic Evaluation and Associated Factors at Menelik II Referral Hospital Addis Ababa, Ethiopia. *Journal of Medicine Journal*. 2016.
2. Shahzad S, Younas T. Clinical audit on quality of preanesthesia evaluation. *Anaesthesia, Pain & Intensive Care*. 2021;25(1):15-20.
3. Cooray T. Audit to evaluate the patients view, regarding the preoperative visit of the patients by the anaesthetist. *Sri Lankan Journal of Anaesthesiology*. 2011;19.
4. Gebremedhn EG, Nagaratnam V. Assessment of patient satisfaction with the preoperative anesthetic evaluation. *Patient related outcome measures*. 2014;5:105-10.
5. Vyhunthan G, de Silva NA. Audit to evaluate preoperative visit to patient by anaesthetist. *Sri Lankan Journal of Anaesthesiology*. 2012;20(2).
6. Gupta A, Gupta N. Patient's experiences and satisfaction with preanesthesia services: A prospective audit. *Journal of anaesthesiology, clinical pharmacology*. 2011;27(4):511-5.
7. Shrestha A, Piya R, Pradhan M, Amatya SP, Paudel S. Assessment of patients' satisfaction with pre-anesthetic checkup in a medical college teaching hospital. *Journal of Advanced Medical and Dental Sciences Research*. 2023;11(4):29-33.
8. Hepner DL, Bader AM, Hurwitz S, Gustafson M, Tsen LC. Patient satisfaction with preoperative assessment in a preoperative assessment testing clinic. *Anesthesia & Analgesia*. 2004;98(4):1099-105.
9. Capuzzo M, Alvisi R. Is it possible to measure and improve patient satisfaction with anesthesia? *Anesthesiology clinics*. 2008;26(4):613-26, v.
10. Reuter U, Jurack B, Engelmann N, Busch T, Schnoor J. Residents achieve a high patient satisfaction in pre-anesthetic patient assessment. An Observational Study. *Open Journal of Anesthesiology*. 2014;4(11):263.
11. Fetene MB, Bayable SD, Wendimu ES, Belehu KD, Almaw AA, Dula PK, et al. Perioperative patient satisfaction and its predictors following surgery and anesthesia services in North Shewa, Ethiopia. A multicenter prospective cross-sectional study. *Annals of medicine and surgery (2012)*. 2022;76:103478.
12. Ambulkar R, Patel A, Patil S, Savarkar S. Patient satisfaction with anaesthesia services in a tertiary care cancer centre. (SAY study). *Journal of anaesthesiology, clinical pharmacology*. 2022;38(1):111-7.
13. Kouki P, Matsota P, Christodoulaki K, Kompoti M, Loizou M, Karamanis P, et al. Greek surgical patients' satisfaction related to perioperative anesthetic services in an academic institute. *Patient preference and adherence*. 2012:569-78.
14. DeMaria Jr S, DeMaria AP, Silvay G, Flynn BC. Use of the BATHE method in the preanesthetic clinic visit. *Anesthesia & Analgesia*. 2011;113(5):1020-6.
15. Shaaib H, Khalid E, Mohamed B, Elhossein A. Patient satisfaction with the facilities of preoperative anaesthesia evaluations clinics. *Adv Res J Multidiscip Discov*. 2019;39:19-24.
16. Fung D, Cohen MM. Measuring patient satisfaction with anesthesia care: a review of current methodology. *Anesthesia & Analgesia*. 1998;87(5):1089-98.
17. Batbaatar E, Dorjdagva J, Luvsannyam A, Savino MM, Amenta P. Determinants of patient satisfaction: a systematic review. *Perspectives in public health*. 2017;137(2):89-101.

18. Ferreira DC, Vieira I, Pedro MI, Caldas P, Varela M. Patient Satisfaction with Healthcare Services and the Techniques Used for its Assessment: A Systematic Literature Review and a Bibliometric Analysis. *Healthcare (Basel, Switzerland)*. 2023;11(5).
19. Farzianpour F, Byravan R, Amirian S. Evaluation of patient satisfaction and factors affecting it: a review of the literature. *Health*. 2015;7(11):1460-5.
20. Almeida RSd, Bourliataux-Lajoie S, Martins M. Satisfaction measurement instruments for healthcare service users: a systematic review. *Cadernos de saude publica*. 2015;31(1):11-25.
21. Benwu KM, Gebremedhin HG. A prospective study on elective surgical inpatient satisfaction with perioperative anaesthesia service at Ayder comprehensive specialized hospital, Mekelle, Ethiopia. *BMC anesthesiology*. 2019;19(1):46.
22. Thiedke CC. What do we really know about patient satisfaction? *Family practice management*. 2007;14(1):33-6.

## ANNEXES

### ANNEX I: CONSENT FORM

Hello, how are you?

My name is Samrawit Regassa Kefene. I am currently doing thesis for the partial

fulfillment of specialty certificate of ACCPM in AAU CHS Department of Anesthesia, I would like to ask you a few questions regarding the provision of preoperative anesthetic evaluations at Tikur Anbesa Specialized Hospital (TASH) in Addis Ababa, Ethiopia. The purpose of this study is to assess patient satisfaction with these evaluations and to identify the factors that influence their satisfaction. The findings will be valuable in improving the quality of preoperative anesthetic services at the hospital. Your participation in this interview is crucial for understanding patients' experience in this area. Please be assured that your responses will be kept strictly confidential, and your name will not be recorded. Participation is entirely voluntary, and you may choose not to answer any question or stop the interview at any time if you feel uncomfortable. May I have your consent to proceed? You may ask questions now and, in the future, if you do not understand something that is being done.

Here are addresses of individuals who you can contact:

Dr. Samrawit Regassa Kefene Phone No +251-935435865 samrawitrege@gmail.com

1 – If yes, proceed to the interview. 2 – If no, skip to the other participant

If yes, Study participant's Unique ID No. \_\_\_\_\_ Signature \_\_\_\_ Date \_\_\_\_\_

Data collector's Name \_\_\_\_\_ signature \_\_\_\_\_

Supervisor's Name \_\_\_\_\_ signature \_\_\_\_\_

## **ANNEX II: QUESTIONNAIRE**

### **Part 1. Baseline characteristics of patients**

<b>No.</b>	<b>Baseline characteristics of patients</b>	<b>Response</b>
1	Age	
2	Gender	1. Male 2. Female
3	Marital status	1. Single 2. Married 3. Divorced 4. Widowed
4	Education Level:	1. Can't read and write 2. Read and write 3. Primary education 4. Secondary education 5. Higher education
5	Residence	1. Urban 2. Rural
7	Your health care coverage status	1. social Health insurance, 2. Private Health insurance 3. Paying out of pocket?
8	Do you have Comorbid Diseases?	1. Asthma 2. Hypertension 3. Diabetes Mellitus 4. Psychiatric 5. Renal failure 6. cardiac illness 7. Others (Specify )_____
10	ASA class	1. ASA I 2. ASA II 3. ASA III 4. ASA IV
11	Type of operation	1. Minor surgery 2. Major surgery

12	Have u had surgery under anesthesia in z past?	1. Yes 2. No
----	--	--------------

Part 2. Health care related data

13	<b>Physical facility</b>	<b>Yes</b>	<b>No</b>
14	Are you Satisfied by Neatness of preoperative assessment area?		
15	There are enough waiting chairs in the Preoperative assessment area?		
16	Preoperative clinic location is easy to find?		
17	Waiting time is too long?		
18	<b>Health care related data</b>	<b>Yes</b>	<b>No</b>
19	Patient seen by anesthesiologist?		
20	Anesthesiology were punctual and Reachable?		
21	Anesthesiolgist introduced him/herself		
22	History was taken in detail?		
23	Are you Satisfied by the Physical examination done?		
24	The anesthetist considers your privacy during examination?		
25	Fasting instruction was given adequate?		
26	Information about anesthesia type was given adequate?		
27	Information about postoperative complications was given adequate?		
28	Information about postoperative analgesia was given adequate?		
29	Information about PONV was given?		
30	Anesthesiologist spent adequate time with patient?		
31	were your questions answered adequately?		

32	Did you feel less anxious after anesthetist visit?		
33	are you satisfied with the communication from the anesthesiologist?		
34	Are you satisfied with the preoperative anesthetist visit?		
35	Did you feel that you were involved in the decision-making process regarding your anesthesia?		