

**ASSESSMENT OF PATIENT SATISFACTION WITH PREOPERATIVE
ANESTHETIC EVALUATION AND ASSOSATED FACTORS AT
MENELIK II REFERAL HOSPITAL ADDIS ABABA, ETHIOPIA**



**A RESEARCH PAPER SUBMITTED TO THE DEPARTMENT OF ANESTHESIA,
COLLEGE OF HEALTH SCIENCES, ADDIS ABABA UNIVERSITY, FOR THE
PARTIAL FULFILMENT OF THE REQUIREMENT OF MASTERS IN ANEASTHESIA.**

BY: - ABATENEH MELEKAMAYHU WAHIDI (BSc)

June 3, 2016 G.C

ADDIS ABABA, ETHIOPIA

ADDIS ABABA UNIVERSITY COLLEGE OF HEALTH SCIENCES DEPARTMENT OF ANESTHESIA

Name of investigator	ABATENEH MELEKAMAYHU WAHIDI
Full Title of the Research Paper	ASSESSMENT OF PATIENT SATISFACTION WITH PREOPERATIVE ANESTHETIC EVALUATION AND ASSOSATED FACTORS AMONG SURGICAL PATIENTS AT MENELIK II REFERAL HOSPITAL ADDIS ABABA, ETHIOPIA
Total Cost of the project	12,248.5 ETB (589.44 USA Dollar)
Source(s) of Funding	AAU
Address of investigator	+251-911-831-969
	+251-118-634-772
	P.Box 20372/1000
	romeabaty@gmail.com aenatu@yahoo.com
Name of Advisor(s)	WOSENEYELEH ADMASU (BSC, MSC)
	+251-911-104-940
	wadmasu@gmail.com

June 3, 2016 G.C

ADDIS ABABA, ETHIOPIA

Abstract

Background: Patient Satisfaction- refers to a state of pleasure or happiness with an action or service especially one that was earlier desired. Patient satisfaction is progressively appreciated measure of outcome for health care procedures and it was a measure of success in this hospitals. It was affected by anesthetist's patient interaction, in the preoperative anesthetic evaluation. No prior study conducted in our setup.

Objective: The purpose of this study was to evaluate inpatients' satisfaction with preoperative anesthetic evaluation and associated factors at Menelik II Referral Hospital Addis Ababa Ethiopia.

Methods- Institutional based cross sectional study was conducted at Menelik II Referral Hospital from Jan 6 to Feb 6, 2016, All patients who remained for elective surgery were included in the study period and interview 24 hours after operation. Data were collected using pretested standard questionnaires. All items in the structured questionnaire were scored on five point Likert scale. Data was entered and analyzed using Statistical Package for Social Sciences (SPSS) version 20. Binary logistic regression was used to measure statistical significance between dependent and each independent variable. P-value 0.05 and 95% CI was used as cut off point.

Results: Two hundred and seventy-five patients were operated upon under anesthesia during the study period. Of these, a total of 224 patients were included in this study with a response rate of 81.5 %, with the overall proportion of patients who said they were satisfied with anesthesia services was 72.3 %.the major factors that take patient dissatisfaction were 68.1% of patient explain anesthetist were not introduce him or herself to the patient, information on postoperative analgesia were 99.1% and postoperative nausea vomiting management were accounts 84.8%.

Conclusion and recommendation: Patient satisfaction with anesthesia services was low 72.3 % in our setup compared with many previous studies, and females more dissatisfied 42.4 % than males 57.6 %. Factors that affected patient satisfaction negatively may be preventable or enhanced. Further study should be done and patient satisfaction give an emphasis.

ACKNOWLEDGEMENTS

I would like to express my heart-felt gratitude to my advisors Woseneyeleh Admasu for his constant motivation, support, scientific inputs, personal helps and friendly nature which has always made me feel at ease with him and I will always look back on him for any support.

I would never be able to pay back my brother Lealem Gedefaw his advising and moral support which has given me wings to fly to make this thesis a possibility.

My acknowledgement drive never be complete without the special mention of AAU for their financial support.

Lastly but not list we would to thank Menelik II Referral Hospitals administrators, surgical wards coordinator, Anesthetists for their support to the important information to my paper, surgical patients, my classmate and data collectors.

Table of Contents

ABSTRACT.....	III
ACKNOWLEDGEMENTS	IV
TABLE OF CONTENTS	V
LIST OF TABLE.....	VII
LIST OF FIGURES.....	VIII
ACRONYMS AND ABBREVIATIONS	IX
OPERATIONAL DEFINITION	X
CHAPTER ONE: INTRODUCTION	1
1.1. BACKGROUND	1
1.2. STATEMENT OF PROBLEM	3
1.3. SIGNIFICANCE OF THE STUDY	5
CHAPTER TWO: LITERATURE REVIEW.....	6
CHAPTER THREE: OBJECTIVES	12
3.1. GENERAL OBJECTIVE.....	12
3.2. SPECIFIC OBJECTIVES	12
CHAPTER FOUR: METHODS AND MATERIALS	13
4.1. STUDY AREA AND PERIOD	13
4.2. STUDY DESIGN	13
4.3. POPULATION	13
4.3.1. Source population.....	13
4.3.2. Study population	13
4.4. INCLUSIVE AND EXCLUSION CRITERIA	14
4.4.1. Inclusion Criteria	14
4.4.2. Exclusion Criteria	14
4.5. STUDY VARIABLES.....	14
4.5.1. Independent variables	14
4.5.2. Dependent variable	14
4.6. DATA COLLECTION AND MANAGEMENT	14
4.7. DATA QUALITY ASSURANCE	15
4.8. DATA PROCESSING AND ANALYSIS	15
4.9. ETHICAL CONSIDERATION	16
4.10. DISSEMINATION OF THE RESULT	16
CHAPTER FIVE: RESULT	17
CHAPTER SIX: DISCUSSION	27
CHAPTER SEVEN CONCLUSION AND RECOMMENDATION	29
7.1. CONCLUSION	29
7.2. RECOMMENDATIONS	29
7.3. STRENGTH OF THE STUDY	29
7.4. LIMITATION OF THE STUDY	29

REFERENCE	30
ANNEX.....	33
I. INFORMED CONSENT SHEET ENGLISH VERSION	33
II. QUESTIONNAIRE.....	34
III. DECLARATION	38

List of Table

1. **Table-5.1:** General socio-demography of study participant preoperative anesthetic services satisfaction at Menelik II Referral Hospital, Addis Ababa, Ethiopia, 2016.19-20
2. **Table 5.2:** Socio-demography of study participant preoperative anesthetic services satisfaction in Relation to disease and ASA Status at Menelik II Referral Hospital, Addis Ababa, Ethiopia, 2016..... 20-23
3. **Table-5.3.** Association between various determinants and total satisfaction among patients who planned to undergo elective surgery and take preoperative assessment in AOR at M II Referral Hospitals, Addis Ababa, Ethiopia,2016..... 25-26

List of Figures

1. **Figure 5.1.** Distribution of overall satisfaction of patient in preoperative assessment at menelik II Referral Hospital, Addis Ababa, Ethiopia 2016.....18
2. **Figure 5.2.** Level of satisfaction of the patients at Menellik II Referral Hospital in relation to the physical facility Addis Ababa, Ethiopia2016.18
3. **Figure5. 3.** Overall satisfaction of the patient in the skill of anesthetist at Menelik II hospital Addis Ababa Ethiopia,2016.23
4. **Figure 5. 4.** Level patients of satisfaction in relation to Quality of services at Menellik II Hospital, Addis Ababa, Ethiopia, 201625

Acronyms and abbreviations

ASA - American Society of Anesthesiologists

M II R H – Menelik the second referral hospital

AAU –Addis Ababa University

PONV- Post Operative Nausea and Vomiting

OSA- Obstructive sleep apnea

SPSS- Statistical Package for the Social Sciences

DM- Diabetes mellitus

HPN- Hypertension

Operational Definition

Service - any activity undertaken to meet the patient needs.

Quality - User based quality is defined as “fitness for use” It is also defined as meeting the desires and expectations of customers.

Satisfaction: Meeting the perceived needs and expectations of the clients in relation to factors related to the health care provider and Facilities

Inpatients: Patients who had a hospital stay greater than one day

Satisfied: In this study refers participants who have securing the overall satisfaction of mean score or more on the given items to measure satisfaction

Dissatisfied: In this study refers participants who have securing the overall satisfaction of below mean score on the given items to measure satisfaction

Monthly income- is defined as an average amount of revenue a patient and his/her family members earned ETB per month

Payment Method- referred to the source of money expended for the hospital fee.

Chapter one: Introduction

1.1. Background

Patient satisfaction is a subjective feeling about gratification of wishes or the degree of similarity between expectations and achievement. Patient satisfaction is the degree of gratifying patients' anticipation, which is an important component and quality indicator in the preoperative anesthetic evaluation. Patient satisfaction commonly refers to how well the patient's expectations about the service of medical care have been met.¹ when applied to medical care; patient satisfaction can be considered in the context of patient's judgment of their desires and expectations of health care.²

Patient satisfaction is thus, a multidimensional concept and a subjective phenomenon that is linked to perceived needs, expectations and experience of care.³ Patient satisfaction is a highly desirable outcome of clinical care in the hospital and may even be an element of health status itself. A patient's expression of satisfaction or dissatisfaction is a judgment on the quality of hospital care in all of its aspects whatever its strengths and weakness. Patient satisfaction is a suggestion that should be crucial to the assessment of the quality of care in hospitals.⁴

Measuring satisfaction has become an ongoing health care challenge. Individual patient attitude, expectations, and demographics clearly influence patient satisfaction levels. Given the same quality of care, two individuals may have radically different perceptions and, different satisfaction levels. Patients' perception of medical care is increasing importance to educators, researchers and clinicians. The emphasis on patient satisfaction is reliable with the trend towards holding health professionals accountable to their patient.⁵ the effectiveness in health care is determined to some degree by patient satisfaction with services provided.

The evaluation of patient satisfaction is a core aspect of the continuous quality improvement in anesthesia service that can be affected by the preoperative anesthetist visit. This visit enables the anesthetist to know about the patient's general health status and the nature of surgery, to choose the type of anesthesia, and to discuss perioperative complications and their management with the patient.⁶

Preoperative anesthetist visits and preparation is important parts of anesthetic provision. It is useful to know about the patient's general status and nature of surgery and to choose the type of anesthesia. This creates a chance for the patients to get to know the anesthetist, to learn about

anesthesia options, and to discuss postoperative pain, nausea, and vomiting management and other possible complications. In addition, preoperative assessment decreases patient anxiety, minimizes the cancellation of surgery by surgeons and anesthesiologists, improves the patient's experience of their hospital stay, and may reduce complication rates and mortality.^{7, 8}

In clinical settings such as anesthesia using patient satisfaction as an indicator to monitor the quality of clinical care has potential merit. For patient, it represents an evaluation of the health care experiences based on their own values, perception and interaction with the environment. For the service provider, patient satisfaction can reflect many facets of care such as bedside skills, efficient attention to needs, participation in decision making, adequate communication and information.⁹

Recently, recording of patient satisfaction has been considered by the medical community as an important parameter in the analysis of administered health care services.^{10,11} It is considered to be conclusive for two reasons: first, it may enable the tracing and correction of health care system impotencies and problems; and second, this approach can meet patients' desires and expectations, resolve their speculations, and consequently, increase their trust and cooperation in the national health care system policy and practice.¹² Traditionally, the perceived role of the anesthesiologist has been restricted to the immediate preoperative and intraoperative periods.¹³ whereas anesthesiologists are now considered to have greater involvement in preoperative preparation and postoperative care.^{14, 15} this should allow earlier detection and treatment of postoperative complications.

In an Italian hospital "kindness regard of caregivers" along with "information given by the anesthesiologist" and "feeling safe" was good indicators for predicting patient satisfaction. They also concluded that surgical patient's value emotional and relational factors most in order to be satisfied.¹² Health care providers should work towards improving the communication skill of their professionals along with having technically competent workers which could possibly affect the perception of the patient about all of the variables that will be identified as predictors of patient satisfaction in this study. Health care professionals are also expected to control their patients' expectations and understanding of treatment to provide the highest level of satisfaction.¹⁶ In fact to improve patient satisfaction health care professionals would be advised to pay more attention to patient understanding and expectations even at the expense of improving patient outcome. The close relationship between patient expectations and adequate informed consent cannot be ignored.¹⁷

1.2.Statement of Problem

Nowadays, patients are looking for easy and quick services in the fast growing world. The patients in general develop loyalty towards Hospitals based on significant interpersonal experiences they have with the professionals and about the quality of services of the hospital. This has become a central part of hospital management strategies for quality assurance and accreditation process in most countries, distinguishing that lack of sufficient data can severely inhibit an organization's ability to understand its strengths and to target areas in which performance can be improved.¹⁸

Patient's perception about health care systems seems to have been largely ignored by healthcare managers in developing countries. Patient satisfaction depends upon many factors such as: quality of clinical services provided, behavior of staff, cost of services, hospital infrastructure, physical comfort, emotional support and respect for patient preferences.¹⁹

Many developing countries like Kenya, Uganda, Tanzania, Ethiopia, Somali, Zimbabwe, Malawi, Nigeria, and Ghana among others face the difficulty in adequate budget allocation and constrained capacity for provision of quality health care to satisfy the patient's needs. This is largely attributed to poverty, poor economic performance and population growth leading to reduced growth in health sectors, inadequate budget allocation and constrained capacity for provision of quality social services including health care.²⁰

In Maniac, Mozambique, satisfied patients were positively associated with increased level of the provider and short waiting time at the health center. Other source of Dissatisfaction includes lack of adequate transportation, inadequate physical examination by providers and failure to obtain prescribed medication. Declining patient satisfaction with increasing level of educational attainment and the reverse with increasing age has been observed.²¹

Inspite of increasing demands for health services, many Sub-Sahara African countries in the region are anxious to further mobilizes public resources and at the same time explore new financing modalities, though not many countries have succeeded in putting in place sustainable health care financing policies and strategies to satisfy the patient's needs .²⁰

Ethiopia, being among the least privileged nations in the health in the world with high morbidity and mortality from communicable disease putts a high pressure on patient satisfaction and quality

of service delivery.²² Therefore, it is important to assess the opinion of local people, as well as their degree of satisfaction with available resource service to improve quality and efficiency of health services which can make public health services more responsive to people's needs and expectations.

Patient satisfaction with preoperative care remains largely undiscovered and only few studies in anesthesia have assessed patient satisfaction, and most are restricted to day case surgical patients.²³⁻²⁴

This study was aimed to assess patient's satisfaction towards preoperative anesthetic assessments to establish baseline information on satisfaction by identifying areas of dissatisfaction as it was an ultimate impact on quality of service delivery.

1.3. SIGNIFICANCE OF THE STUDY

Satisfaction data play significant role in the strategy and health care providers use in delivering services for clients. It was found that patient satisfaction with preoperative anesthetist visit was very low and several identified factors are associated with dissatisfaction that may be preventable and better treated according to the Royal College of Anesthetists and American society of anesthesiologist (ASA) preoperative anesthetic evaluation standards. Measurement of patient satisfaction is increasingly playing a fundamental role in the growing thrust towards patient and health care providers. It is also viewed as an establish indicator of quality of care despite it was dominated by measures of organizational aspects in the quality of health care equation .Therefore, it is very important to conduct research on this topic and will be used as bull's eye in identification of what has been done and to correct, prevent, or better treat the bottle necks of the anesthesia services in M I I R H.

It was easier to assess the patient's satisfaction towards preoperative anesthetic evaluation service than evaluate the quality of medical services that they receive.

Therefore, this study was done to evaluate inpatients' satisfaction with preoperative anesthetic evaluation and associated factors among surgical patients could be useful.

This study was also helpful for program planner's, policy makers, health care managers and hospitals managers to understand the extent of the problem in the hospital and to plan different strategies which help them to improve patient's satisfaction and thereby to advance quality of health care delivery.

To the best of our knowledge, there was no study conducted in my study area thus this study was aimed to evaluate inpatients' satisfaction with preoperative anesthetic evaluation and associated factors among surgical patients.

Chapter Two: Literature Review

Hospitals are an important part of any health system. They Provide-Curative care, Transfer Knowledge, Work as referral for patients. In the health care industry, hospitals provide the same types of services, but they do not provide the same quality of service. Furthermore, consumers today are more aware of alternatives on offer and rising standards of service, which increased their expectations. They are also becoming increasingly critical of the quality of service they experience. To achieve service excellence, hospitals must strive for “zero defections,” retaining every customer that the company can profitably serve. “Zero defections” require continuous efforts to improve the quality of service delivery system patients is the only reason for a hospital’s existence need services, which are reasonably accessible and readily available at all times.²⁷

Patient satisfaction has been associated with improved collaboration with health services and adherence with medical recommendations as well as with improved clinical outcomes and health status.²⁵ Patients’ assessment of the efficiency of services provided by a hospital is an important index of patient satisfaction. In view of the positive relationship between patient satisfaction and health outcomes, satisfaction or dissatisfaction with facilities provided in hospital as assessed by patients provides opportunity for improvement or change.²⁶

Satisfaction is an important element in the evaluation of services rendered by a hospital. It refers to the patient's state of being adequately rewarded.²⁸ Patient satisfaction or dissatisfaction has been shown to be influenced by patient's expectations, their medical condition and health status, psychosocial variables, and characteristics of the treatment.²⁹

Factors affecting satisfaction are under investigation throughout the world. Thus far, several validated studies in 1996 Chicago in different ethnicities have been performed regarding anesthesia services and its assessment requires multiple measure of process combined with measure of outcome. Fears of anesthesia include postoperative nausea and vomiting, prolonged drowsiness and awareness (or not waking up) Interpersonal processes including perceived empathy, perceived technical competency, and non-verbal communication significantly influence patient satisfaction.³¹

The study done in 1999 Springfield USA Evidence of related literature revealed that communications are linkage between provider and patients and contribute to patient's satisfaction.³²

The study done in 2001 Johns Hopkins hospital found that advanced age and female sex consistently correlates with increased levels of satisfaction. They also noted that these results might be due to the fact that these groups receive more information or have more positive interactions with their health care providers.³³

In another study in 2007 South Caroline University in USA the importance of patients' demographic and social factors in determining satisfaction. Nevertheless, the literature does shed some light on how particular demographic factors affect patient satisfaction.” According to this review, the most consistent finding is the one that deals with age, since older patients seem to be more satisfied with their health care. It has also been reported that studies on the effects of biological gender on patient satisfaction are not consistent, with some showing that females tend to be less satisfied and others showing the opposite conclusion. She also notes that “most studies have found that individuals of lower socioeconomic status and less education tend to be less satisfied with their health care.³⁴

A study in Australia, patient satisfaction and other predetermined outcomes such as nausea; vomiting, pain and complication were assessed. The overall level of satisfaction was high (96.8 %), 2.3 % patients were somewhat dissatisfied and 0.9 % were dissatisfied with their anesthetic care.³⁰

A study in Greek showed that the overall patient satisfaction in anesthesia services rates in the range of 96.3%.³⁵

A study conducted in 1991 Taiwan showed a higher score of satisfaction in anesthesia inclusive of waiting time for surgery in the operation room, attitude towards an anesthetic staffs and during post-operative visit in the management of complications of patients who were offered small video teaching in comparison with patients of traditional preoperative visit and the clothing worn by the anesthetist did not affect patients' satisfaction.³⁶

An experimental result of the study done in 2009 Taiwan on post-operative sleep apnea (OSA) surgery reveals a high overall level of satisfaction. Information and involvement in the decision-

making process was by far the most important dimension to influence patients' satisfaction. Adequate decision making on the part of the patient relies on useful information given by the anesthetist and a trusting patient relationship. Baseline severity and income level have various impacts on different dimensions of satisfaction in OSA patients.³⁷

Studies showed in 2013 Kashihara Japan that Patient involvement in decision making increases satisfaction with anesthesia services and 3.9 % had dissatisfaction with anesthesia. The rates of dissatisfaction were higher in women than men.³⁸

A review of the study 1997 done at Sassoon General Hospital Indian Many people have a strong belief that the high levels of positive opinions of patients might be closely related to some independent factors such as standards of living, gender, age groups, and even status of the patients whether they are single, married, or widowed, etc. Nonetheless, some other researchers have concluded that there is little relationship between socio-demographic characteristics with satisfaction levels and Some findings showed that people who are from the same ethnic groups tend to pay more attention to help the people who are from the same sources.³⁹

The study done in 2007 Indian on OSA shows that older patients had lower overall satisfaction levels, were less tolerant of "perioperative discomfort", and had lower satisfaction with the provider's "personal manner", and "explanation of condition". It is presumed older patients may have more comorbid disease and generally need longer wound recovery time after surgery than younger patients, and this consequently leads to lower satisfaction levels. Although not statistically significant, females are more dissatisfied than males during all levels of anesthesia care. Elderly showed lack of satisfaction over that of adult patients which was not significant. Over stay in preoperative area was more dissatisfying. However, nor the duration of stay in the recovery room add any effect on problems faced and corresponding satisfaction at various levels. It is easily visible from this literature that elderly, females, uneducated patients suffered more during the recovery room stay and postoperative period than their counterparts. However, the work background of the patients did not contribute to the ultimate dissatisfaction levels and women have a greater risk of 'minor' postoperative complications, such as nausea and vomiting, headache and backache and recover less well after operation.⁴⁰

In Indian 2010 study done on measuring patient satisfaction at public health Facilities found that 65% satisfied patients with respect to cleanliness and 49% patients were unsatisfied about sitting arrangement.⁴¹

The study conducted in Saudi Arabia Patient fear and anxiety throughout the anesthesia was very obvious (57.4%). Fear can be managed pharmacologically by adequate premedication and anxiolytic agents, but primary it should be done by increasing the trust between patient and anesthesia staff, and therefore, this dimension correlates significantly with the dimension of patient information. Results as regards gender, education level and anesthesia severity score classification ASA found that female dissatisfaction was significantly higher than male dissatisfaction. Also, patients with ASA I–II were significantly less satisfied than ASA III patients, and university-level educated patients were less satisfied than others. That female patient is more prone to postoperative nausea and vomiting and have a lower threshold for pain and the studies which reported that women expressed more fears and different concerns about anesthesia than men.⁴²

The study done in 2002 Nigeria on Assessment of the efficiency of services provided by a hospital is an important index of patient satisfaction. In view of the positive relationship between patient satisfaction and health outcomes, satisfaction or dissatisfaction with facilities provided in Hospital as assessed by patients provides opportunity for improvement or change.⁴³

A research done in 2005 Nigeria on dental surgery clients reveals that adequate patient education given after oral surgical procedures has been demonstrated to improve patient satisfaction and decrease postoperative morbidity.⁴⁴ Having adequate information about both satisfying and dissatisfying factors in the hospitals is relevant in order to provide recommendations to improve the health service delivery, and result in a better client satisfaction.

There are also studies in 1990 Tanzania that some social advantages such as educational backgrounds, employments, revenues, and a warranty are the keys for clients to satisfy.⁴⁵

According to the study conducted to determinants of clients' satisfaction with healthcare services at Pumwani maternity hospital in 2007 Nairobi, majority of the clients felt that the providers did not keep them waiting for too long to be served on arrival at the facility and showed that short waiting time and long consultation time were associated with high satisfaction. There was a significant relationship with longer waiting time associated with low level of client satisfactions.⁴⁶

that efficiency of services refers to promptness of the care given to patients, including issues like waiting time.

The study conducted in 2013 at Bahirdar Felege Hiwot Referral Hospital, North West Ethiopia revealed that 93.2% were responded as “satisfied” to cleanliness of service delivery rooms, where as 70.8% as “dissatisfied” to availability of sign and direction indicators to ease the way in the hospital.⁴⁷

The study conducted in 2013 Gondar university Hospital, North West Ethiopia anesthetist introduced him/her- self to patients 51.3 %, approaches of the anesthetists to the patient were 98.1 % and 50.6 % of the respondents were not given adequate information about anesthesia, 73.1 % of respondents were not given a chance to choose type of anesthesia and 76.3 % of respondents were not given a chance to ask questions about anesthesia and Overall patient satisfaction with the preoperative anesthetist visit was low (64.7%) in Gondar university Hospital.⁴⁸

The study done in 2014 Debremarkose referral hospital North West Ethiopia Patient satisfaction or dissatisfaction has been shown to be influenced by patient's expectations, their medical condition and health status, psychosocial variables, and the quality of the interpersonal skill of physicians influenced patient satisfaction and recall more than the quantity of information and instructions that were provided. Treatment outcomes are more favorable when patients feel they are active participants in care and that their problem has been discussed fully, when they feel encouraged to ask questions, when they feel emotionally supported and when they share their ideas or feelings in the treatment planning process.⁴⁹

The study done in 2014 Gondar university hospital, with a response rate of 87.9% Anesthetists introduced themselves to 24% patients; provided information about anesthesia to 32%, postoperative complications to 21%, postoperative analgesia to 18%, and postoperative nausea and vomiting to 21%; and spent adequate time with 74%. Patients' questions were answered by the anesthetist in 65% of cases, and 65% of patients had reduced anxiety after the anesthetist visit. The patients' overall satisfaction with the preoperative anesthetist visit was 65%.⁶

Preoperative dissatisfying events have no association with level of satisfaction. However intraoperative events have very significant association with level of satisfaction while

postoperative dissatisfying events have very highly significant association with level of satisfaction in Jemba University Specialized Hospital, South West Ethiopia surgical in 2015 inpatients that had undergone surgery under General Anesthesia. In this study interaction during the pre-anesthetics visit, information giving, releasing of patient concerns, and participation in decision making proved to be integral parts in patients' satisfaction.⁵⁰

Chapter Three: Objectives

3.1. General Objective

To assess surgical inpatients' satisfaction with preoperative anesthetic services and associated factors at Menelik II Referral Hospital Addis Ababa, Ethiopia, 2016.

3.2. Specific Objectives

To assess surgical inpatient's satisfaction regarding preoperative anesthetic services at Menelik II Referral Hospital Addis Ababa, Ethiopia.

To identify factors associated with patient satisfaction with preoperative anesthetic services at Menelik II Referral Hospital, Addis Ababa, Ethiopia.

Chapter Four: Methods and Materials

4.1. Study area and period

The study was conducted at Menelik II Referral Hospital, Addis Ababa, Ethiopia from Jan, 6- Feb, 6, 2016.

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 135 from the catchment population of about one million six hundred thousand people. Surgery department is one of the major departments and it has three wards with separate female and male wards in each, two referral clinic, and one operation room which is contained three major operation tables and one intensive care unit. According to the annual report of anesthesia department, 1900 patients were operated upon under anesthesia in 2015.

4.2. Study Design

Institution based cross sectional descriptive study was used.

4.3. Population

4.3.1. Source population

All Surgical inpatients that were undergo elective surgery during the study period were included.

4.3.2. Study population

Selected surgical inpatients that were undergo elective surgery at M-II RH within specified data collection period.

4.4. Inclusive and Exclusion criteria

4.4.1. Inclusion Criteria

All voluntary surgical inpatients were included in the study

4.4.2. Exclusion Criteria

- Very seriously ill patient who was not have somebody to attend them because of the difficulty of interviewed such cases (getting the consent, lack of tolerance the pain or illness).
- Children who are under 18 years who are alone.
- Cognitive dysfunction or any other inability to finish the interview
- Postoperative admission in the intensive care unit was also excluded.
- Patient was discharged before 24 hrs.
- Patient who was not completed preoperative evaluation

4.5. Study variables

4.5.1. Independent variables

- Age, Sex, Marital status, Residence, Income, Educational status, health coverage, Frequency of visit, Comorbidities and ASA status

4.5.2. Dependent variable

- Patients satisfaction

4.6. Data collection and management

Well-structured questionnaire was filled up via a face to face interview by two B.Sc. trained nurses they did not involve in anesthesia care. The questionnaire is designed to obtain information on socio demographic characteristics of respondents and their satisfaction level with the different components of the pre anesthetic evaluations. the questionnaire was prepared in English first and translated to the local language Amharic and again back to translation to English to check for consistency. The key elements of socio-demographic characteristics of the patients attended in the preoperative anesthetic evaluation clinic patient satisfaction regarding on physical facility, Anesthetist communication skills and quality of the services. All respondents were interviewed

postoperatively after twenty-four hours, on an average of 20 minutes was used for interview of each patient.

Response to questioners were standardized to a five point Likert Scale revealed to be optimal for surveys of patient satisfaction. The initial question and dimension set was reviewed by members of ASA Committee on Performance and Outcomes Measurement, strongly disagree (1) disagree (2) neutral (3) agree (4) strongly agree (5)

Finally, the five scale measurement was changed to dicomatus strongly agree and agree outcomes was used as satisfied and strongly disagree, neutral and disagree was put in dissatisfied one to adjusted for analysis.

4.7. Data Quality Assurance

The quality of data was warranted through trained data collectors by categorized according to the language they were interviewed. Completed questionnaire was submitted and reviewed daily to avoid loss of data. Close supervision and daily information exchange included by telephone was used as a means to correct problems in the course of the data collection. Data uniformity and completeness were completed throughout the data collection and analysis; pretest was doing on 5% of sample size at black lion specialized hospital.

4.8. Data processing and analysis

The data was analyzed and recorded on computer using SPSS version 20 data analyzer software. 5% of the questionnaire was analyzed using descriptive statics' and logistic regression analysis and the p-value was used to identify the association between dependent and independent variables ($P < 0.05$ was used as statistical significant. Data was entered into SPSS Version 20 for analysis and cleaned. P values and 95% C.I was used to judge significant of association.

4.9. Ethical Consideration

Ethical clearance and support letter for the study was obtained from Addis Ababa University College of Health Science Ethical Review Committee.

Support letter were found from Department of anesthesia to menelik II referral hospital and Addis Ababa health bureau. Permission was obtained from menelik II Referral Hospital medical director's office and written informed consent were obtained from each study participants after explaining the benefits and risks of the study.

For children below 18 years of age, parental consents were obtained. Any information concerned the participants were confidential

4.10. Dissemination of the Result

This final result will be disseminated to menelik II referral hospital, Addis Ababa University student research program offices, Anesthesia department, Addis Ababa Health bureau, Ethiopian association of anesthetist, Federal ministry of health and will also presented on different seminar. Great effort will be made to publish the finding in national and international trustworthy journal.

Chapter Five: Result

Two hundred and twenty-four consecutive patients over one month were originally enrolled in the study period. Of these, 0.36 % refused, 17.45 % were emergency, 3 (1.09 %) were transferred to Surgical intensive care unit. Satisfaction was identified in 72.3% of patients at the time of preoperative evaluation. (Figure 1)

Baseline characteristics of this study subjects most of the respondents were 26.3% in the age group of 29–38 years and the mean age of the study subjects was 44.49 years $\pm$ 14.886 with minimum and maximum value 14 and 84 years respectively. 56.2%, of the participants were males and the rest 43.8 % were females, of this the majority of participant, 60.3 % were married. (Figure 2)

On education 20.4% were illiterate ,11.1 % were read and write ,15.4 % were elementary school ,19.8 % were secondary school, 22.2 % were diploma and 11.1% were degree and above and the majority of the participant were urban 66.7%. (table 1)

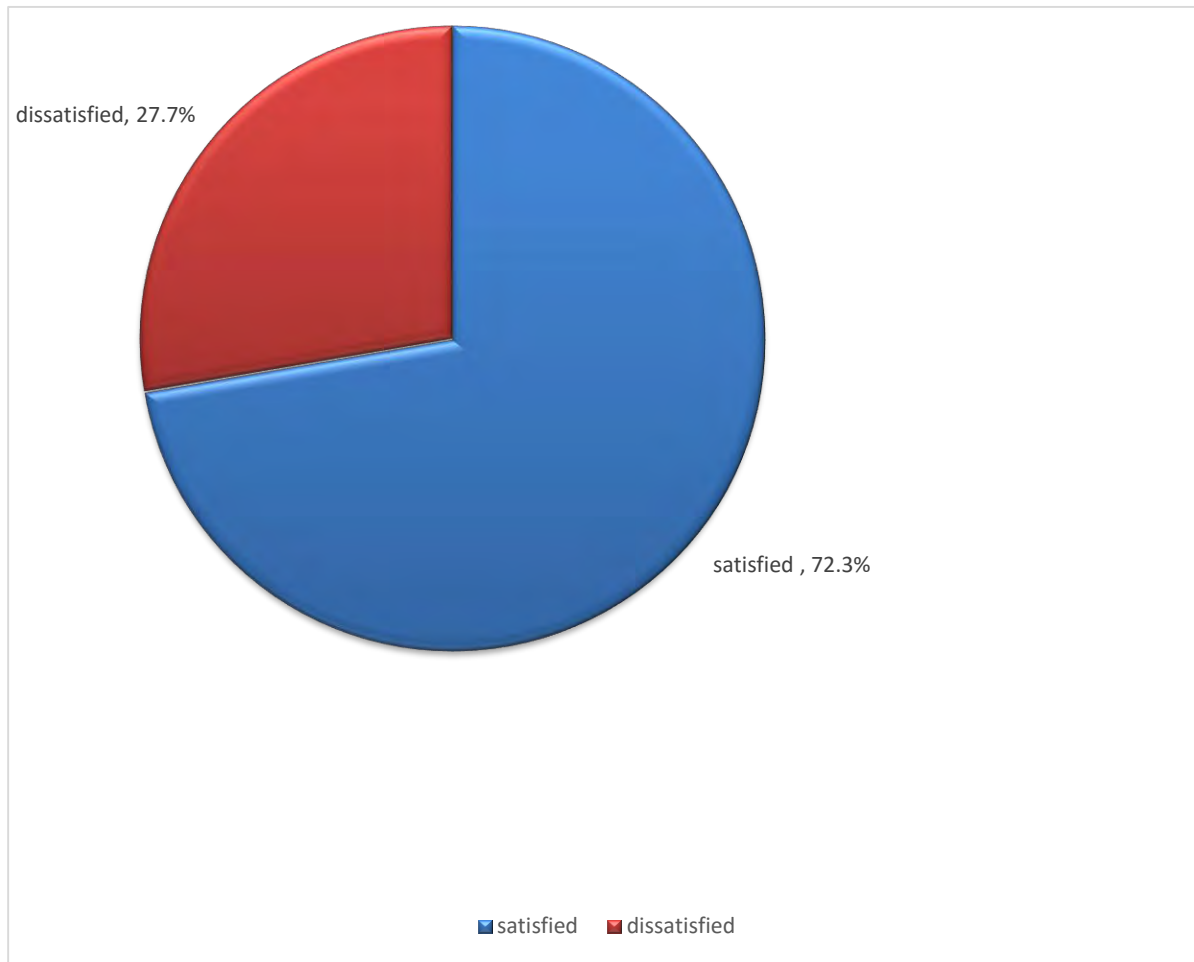


Figure 5.1. Distribution of overall satisfaction of patient in preoperative assessment at menelik II Referral Hospital, Addis Ababa, Ethiopia 2016.

Table-5.1: General socio-demography of study participant preoperative anesthetic services satisfaction at Menelik II Referral Hospital, Addis Ababa, Ethiopia,2016.

Characteristics		Frequency	%	Satisfied		Dissatisfied	
				Frequency	%	Frequency	%
Age in years	≤18 years	5	2.2	2	40	3	60
	19–28 years	24	10.7	19	79.2	5	20.8
	29–38 years	59	26.3	33	55.9	26	44.1
	39-48 years	48	21.4	34	70.8	14	29.2
	49–58 years	41	18.3	31	75.6	10	24.4
	59-68 years	33	14.7	32	97	1	3
	≥69 years	14	6.3	11	78.6	3	21.4
Sex	Male	129	57.6	91	70.5	38	29.4
	Female	95	42.4	71	74.7	24	25.3
Marital Status	Single	61	27.2	40	65.6	21	34.4
	Married	172	60.3	98	72.6	37	27.4
	Divorced	15	6.7	14	93	1	6.7
	Widowed	13	5.8	10	76.9	3	23.1
Educational status	Illiterate	37	16.5	33	89.2	4	10.8
	Read and writes	21	9.4	18	85.7	3	14.3
	Elementary	37	16.5	25	67.6	12	32.4
	Secondary	46	20.5	32	69.6	14	30.4
	Diploma	47	21.0	36	76.6	11	23.4
	Degree and above	36	16.1	18	50	18	50
Residency	Urban	158	70.5	108	68.4	50	31.6
	Rural	66	29.	54	81.8	12	18.2
Occupation	House wife	39	17.4	34	87.2	5	12.8
	Farmer	41	18.3	34	82.9	7	17.1
	Go .employee	64	28.6	42	65.6	22	34.4
	Private employee	49	21.9	33	67.3	16	32.7
	Student	17	7.6	10	58.8	7	41.2

	Merchant	9	4.0	6	66.7	3	33.3
	Other	5	2.2	3	60.0	2	40.0
Income	Less than 1000 birr	66	29.5	53	80.3	13	19.7
	1000-2000	117	52.2	89	76.1	28	23.9
	Greater than 2000	41	18.3	20	48.8	21	51.2
Payment	Paying	155	69.2	107	69.0	48	31.0
	Free	69	30.8	55	79.7	14	20.3
Frequency of visit	New	182	81.3	131	72.0	51	28.0
	Repeat	42	18.8	31	73.8	11	26.2

Disease and ASA status of the patient were operated during the study period and out of the total patients 58 % were ASA₁, 37.7% were ASA₂ ,3.1% were ASA₃ and 1.2% were ASA₄. Of these patient 9.9% were Asthmatic. 35.2 % have hypertension, 19.7% have Diabetes Mellitus 1.4%, have Psychiatric disorder, 18.5 % were renal failure, 7% have others 1.1% have asthmatics with hypertension, 12.7 were DM with Hypertension and 4.2 %have DM with asthmatics.

(Table 2)

Table 5.2: Socio-demography of study participant preoperative anesthetic services satisfaction in Relation to disease and ASA Status at Menelik II Referral Hospital, Addis Ababa, Ethiopia,2016.

Characteristics		Satisfied		Dissatisfied	
		Frequency	%	Frequency	%
Patient has comorbid disease	Comorbid Yes	71	76.3	22	23.7
	No	91	69.5	40	30.5
	Asthma	7	53.8	6	46.2
	HPN	25	69.4	11	30.6
	DM	14	82.4	3	17.6
	Psychiatric	1	100	0	0
	Renal failure	6	100	0	0
	Others	5	71.4	2	28.6
	Asthma & HPN	1	100	0	0
	DM & HPN	9	90	1	10
	DM & asthma	3	100	0	0
	I	94	68.6	43	31.4
	II	61	77.2	18	22.8
	III	5	83.3	1	16.7
	IV	2	100	0	

Preoperative anesthetic evaluation

The overall satisfaction of patient regarding physical facility 65.74% of the respondent were satisfied 53.9%, were found anesthetist communication skills were satisfied and the quality of the services found 73.8% at menelik hospital. (Figure 3,4 and 5).

In the binary analysis, satisfaction level was associated with age ($P = 0.030$) with at the group of 29 to 38 years old ($AOR = 0.005$) in 95% CI 0.00-0.594 and family incomes of the patient significantly associated ($P = 0.029$) the less the income the more satisfied (Table 3)

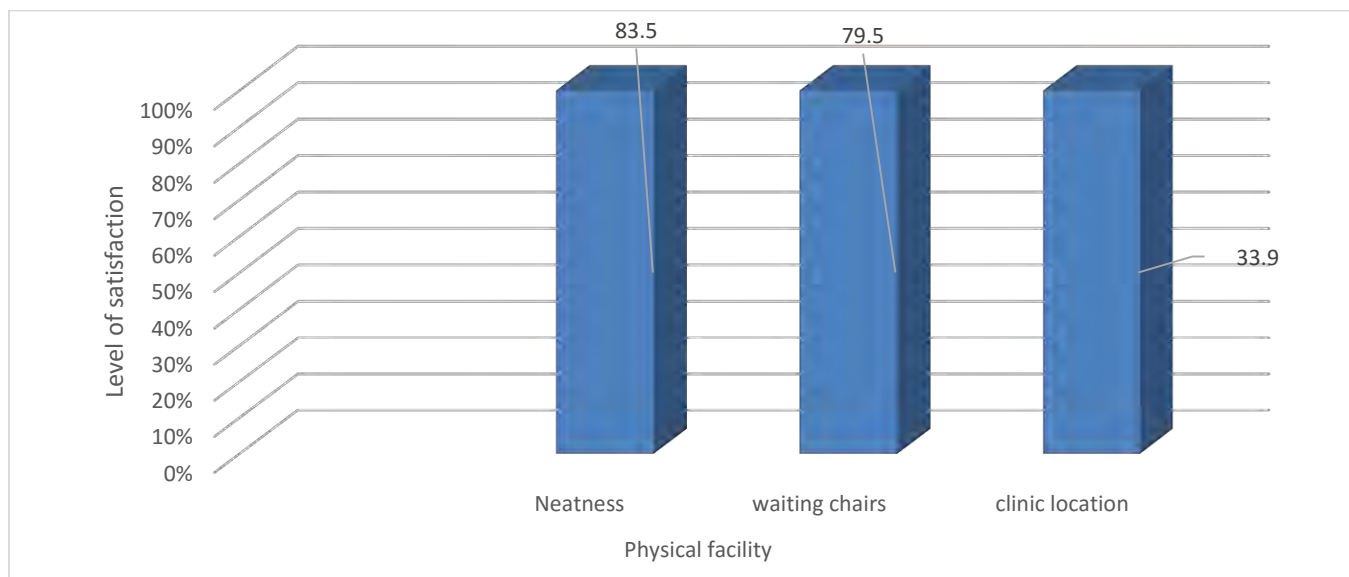


Figure 5.2. Level of satisfaction of the patients at Menellik II Referral Hospital in relation to the physical facility Addis Ababa, Ethiopia2016.

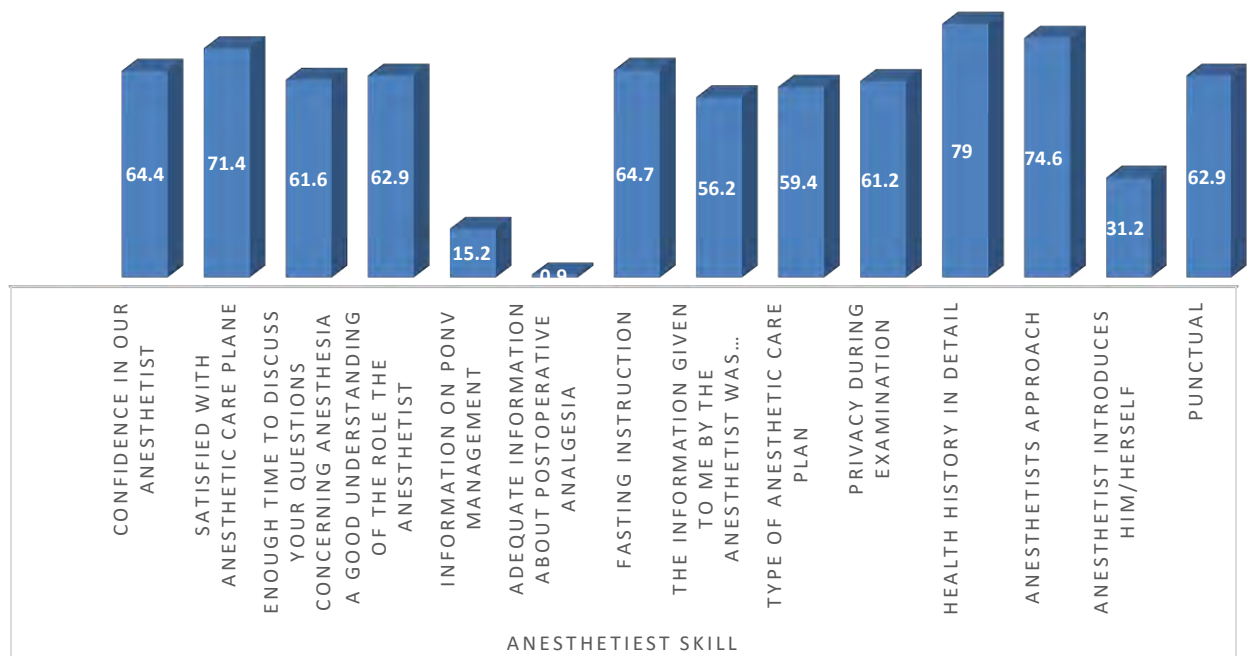


Figure5. 3. Overall satisfaction of the patient in the skill of anesthetist at Menelik II hospital Addis Ababa Ethiopia,2016.

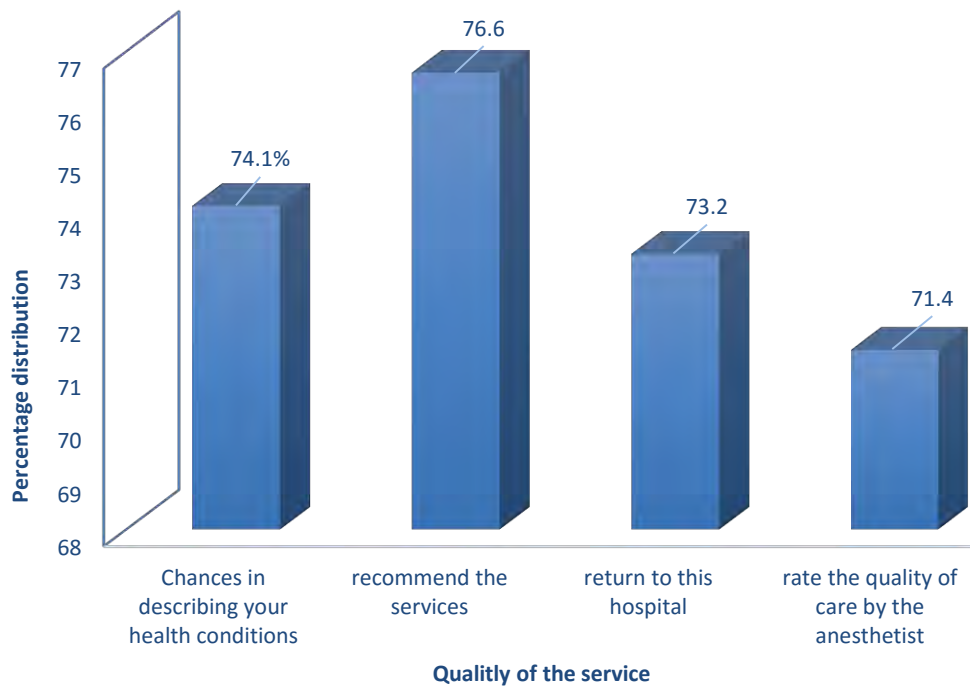


Figure 5. 4. Level patients of satisfaction in relation to Quality of services at Menellik II Hospital, Addis Ababa, Ethiopia, 2016.

Table-5.3. Association between various determinants and total satisfaction among patients who planned to undergo elective surgery and take preoperative assessment in AOR at M II Referral Hospitals, Addis Ababa, Ethiopia,2016.

Characteristics		Satisfied		Dissatisfied		AOR	P-Value
		Frequency	%	Frequency	%		
Age in years	≤18 years	2	40	3	60	0.00	0.999
	19–28 years	19	79.2	5	20.8	0.10	0.126
	29–38 years	33	55.9	26	44.1	0.005	0.030
	39-48 years	34	70.8	14	29.2	0.031	0.111
	49–58 years	31	75.6	10	24.4	0.76	0.237
	59-68 years	32	97	1	3	3127 7468	0.998
	≥69 years	11	78.6	3	21.4		
Educational status	Illiterate	33	89.2	4	10.8	0.016	0.089
	Read and writes	18	85.7	3	14.3	0.010	0.094
	Elementary	25	67.6	12	32.4	0.047	0.112
	Secondary	32	69.6	14	30.4	0.032	0.058
	Diploma	36	76.6	11	23.4	0.735	0.797
	Degree and above	18	50	18	50		
Address	Urban	108	68.4	50	31.6	0.065	0.090
	Rural	54	81.8	12	18.2		
Income	< 1000 birr	53	80.3	13	19.7	30.4	0.029
	1000-2000	89	76.1	28	23.9	2.544	0.401
	Greater than 2000	20	48.8	21	51.2		
Patient has comorbid disease	Asthma	7	53.8	6	46.2	0.000	0.999
	HPN	25	69.4	11	30.6	0.000	0.999
	DM	14	82.4	3	17.6	0.000	0.999
	Psychiatric	1	100	0	0	0.274	1.000
	Renal failure	6	100	0	0	0.486	1.000
	Others	5	71.4	2	28.6	0.000	0.999

	Asthma & HPN	1	100	0	0	0.123	1.000
	DM & HPN	9	90	1	10	0.000	0.999
	DM & asthma	3	100	0	0		

CHAPTER SIX: DISCUSSION

The preoperative evaluation of a surgical patient by an anesthetist is crucial interaction between the patient and the anesthetist. This evaluation allows the anesthetist to assess the patient's medical condition; evaluate the patient's overall health status; determine risk factors related to anesthesia; discuss the techniques of anesthesia and available options for postoperative management.⁶

All these processes can improve anesthesia safety, which contributes highly to enhance outcome for surgical patients. Patient satisfaction is also considered an important indicator of the quality of health care delivery.

In this study anesthetist introduced him/her- self to the patients 31.2%, approaches of the anesthetists to the patient were 74.6 % and 50.6 % of the respondents were not given adequate information about anesthesia, 56.2% of the respondent did explained their type of anesthetic care plan, 61.6% did have enough time to discuss questions concerning anesthesia with the anesthetist and 59.4% showed that the overall proportion of patients who said they were satisfied with anesthesia services at menelik second referral hospital was 72.3 %. This finding was very low compared to a study conducted in Greek showed that the overall patient satisfaction in anesthesia services rates in the range of 96.3%.³⁵ And the study conducted in 2013 at Gondar university Hospital, North West Ethiopia anesthetist introduced him/her- self to patients 51.3 %, approaches of the anesthetists to the patient were 98.1 % and 50.6 % of the respondents were not given adequate information about anesthesia, 73.1 % of respondents were not given a chance to choose type of anesthesia and 76.3 % of respondents were not given a chance to ask questions about anesthesia and Overall patient satisfaction with the preoperative anesthetist visit was low (64.7%) in Gondar university Hospital.⁴⁸

This could be due to different socio-demographic characteristics and study Design.

In this study, the level of satisfaction of males was 70.5 % and that of females was 74.7 % ASA 3-4 patient was significantly less satisfied than ASA 1-2 and 22.1% of college diploma level was satisfied linked to the study conducted in Saudi Arabia showed that education level and anesthesia severity score classification ASA found that female dissatisfaction was significantly higher than male. Also, patients with ASA I–II were significantly less satisfied than ASA III patients, and university-level educated patients were less satisfied than others. ⁴².

This inconsistency might be due to a difference in study design. We interviewed patients after operation which could enable to explore the problem properly but self-administered questionnaire was used in Saudi Arabia.

In this study the age group 29-38 years old was significantly satisfied with the P Value of 0.030 but the study conducted in Maniac, Mozambique and Japan as age increases patient satisfaction rate decreased, this change might be due to large number of aged patients were included in our study in Japan they included small number of aged patients^{21,38}

In our study, the fact that only a 59.4 % of patients were informed about the type of anesthesia and the possible postoperative complications and their management options, postoperative analgesia 0.9 %, and PONV 15.2 % was very low when compared to the study done in 2014 Gondar university hospital, with a response rate of 87.9%.⁶ A study conducted in Australia, patient satisfaction and other predetermined outcomes such as nausea; vomiting, pain and complication were assessed. The overall level of satisfaction was high (96.8 %).³⁰

In this study 83.5 % were responded as satisfied to cleanliness of preoperative room where as 66.1% were as satisfied to find the preoperative clinics was low in this hospitals compared the study conducted in 2013 at Bahirdar Felege Hiwot Referral Hospital, North West Ethiopia revealed that 93.2% were responded as “satisfied” to cleanliness of service delivery rooms, where as 70.8% as “dissatisfied” to availability of sign and direction indicators to ease the way in the hospital.⁴⁷ In Indian 2010 study done on measuring patient satisfaction at public health Facilities found that 65% satisfied patients with respect to cleanliness and 49% patients were unsatisfied about sitting arrangement.⁴¹(Table 3).

Patient satisfaction is the essential indicators that reflects the services quality at any level of health services.

The study on patient satisfaction is an effective means of evaluating the performance of the hospital from the sight of the patient.

Overall patient satisfaction with the preoperative anesthetist visit was low (73.4%) at menelik the second referral hospitals.

On anesthetist skill the patient had 54.7 % of patient were satisfied from the anesthetist was given fasting instruction clearly

Anesthetic care plane, the low satisfaction was just from introduction of anesthetist and permission before anesthetist’s examination, adequate Information about postoperative analgesia and PONV management.

According to the result the patient highest percentage were health cost covered by the patients and patient visited in the hospital was new patients.

According this finding had not comorbid diseases take the majority of the percentage and ASA one patient were account the majority.

CHAPTER SEVEN CONCLUSION AND RECOMMENDATION

7.1. CONCLUSION

In this study majority of the participant reported that it is important to discuss with anesthetist in the preoperative anesthetic evaluation.

It will be helpful in keeping knowing the problem of the patient and improving the quality of the services.

7.2. Recommendations

Patient satisfaction assessment should be regular conducted at least once in the year.

It will be helpful in keeping knowing the problem of the patient and improving the quality of the services.

Continuous effort should be made by the hospital administrative

The hospital administrator's post a clear location symbol.

Training should be given to anesthetists in the areas of the communication skills.

7.3. strength of the study

This study could be an input as it identified the level of satisfaction of patient on preoperative anesthetic evaluation at Menelik II Referral Hospital

7.4. Limitation of the study

Study was conducted in menelik II Referral hospital surgical inpatient Addis Ababa Ethiopia and thus the results cannot be generalized for all Hospitals in Ethiopia.

Intraoperative and postoperative were not included in the study.

Reference

1. Young GJ, Meterko M, Desai KR. patient satisfaction with hospital care: effects of demographic and institutional characteristics 2000;38:325-34
2. Santillan D. Uses of satisfaction data: report on improving patient care. Soc Sci Med 2000; 12: 24 - 26
3. Gurung T. Factors Influencing Patient Satisfaction in a Free Health Care System in the National Referral Hospital, Thimphu, Bhutan Bangkok: Chulalongkorn University; 2003.
4. Patrick J. Torcson, MD, MMM, FACP Patient Satisfaction: The Hospitalist's Role the Hospitalist, 2005
5. Halder D, Sarkar A.P, Bisoi S, Mondal P: Assessment of client's perception in terms of satisfaction and service utilization in the central government health scheme dispensary at Kolkata. Indian 2008 33:121-6
6. Gebremedhn E., Nagaratnam Patient satisfaction with the preoperative anesthetic evaluation 2014:5 105–110 University of Gondar, Gondar, Ethiopia
7. Cooray TC. Audit to evaluate the patients view, regarding the preoperative visit of the patients by the anesthetist. Sri Lankan Journal of Anesthesiology. 2011; 19(1):39–42.
8. Vyhunthan G, Aeshana de Silva NG. Audit to evaluate preoperative visit to patient by anesthetist. Sri Lankan Journal of Anesthesiology. 2012; 20(2):88–91.
9. Hilditch WG, Asbury AJ, Jack E, McGrane Validation of a preanaesthetic screening questionnaire. An aesthesia 2003;5 8:874 -7
10. Myles PS, Williams DL, Hendrata M, Anderson H, Weeks AM. Patient satisfaction after anesthesia and surgery: results of a prospective survey of 10811 patients.2000; 84(1):6–10.
11. Heidegger T, Saal D, Nuebling M. Patient satisfaction with anesthesia care: what is patient satisfaction, how should it be measured, and what is the evidence for assuring high patient satisfaction? Best Pract Res Clin Anesthesiology. 2006; 20(2):331–346.
12. Capuzzo M, Landi F, Bassani A, Grassi L, Volta CA, Alvisi R. Emotional and interpersonal factors are most important for patient satisfaction. 2005; 49(6):735–742.
13. Swinhoe CF, Groves ER. Patients' knowledge of anesthetic practice and the role of the anesthetist. Anesthesia 1994; 49:165–6
14. John M, Robert R, Gilbert E: Patient-Physician Communication: Why and How. JAOA [serial on the internet] 2005, 105(1)
15. Stephen A, Summay AI, Toney R, Richard L: Patient Satisfaction with Primary Health Care Services. International Journal of Quality Health Care 2003, 15(3) :241-249.
16. Yucelt U. An investigation of causes of patient satisfaction/dissatisfaction with physician services. Health Mark Q, 1994; 12:11-28.

17. Tielsch JM, Steinberg EP, Cassard SD, et al. Preoperative functional expectations and postoperative outcomes among patients undergoing first eye cataract surgery. *Arch Ophthalmology*, 1995; 113(10):1312-8.
18. International Journal of Research in Business Management (IMPACT: IJRB) ISSN(E): 2321-886X; ISSN(P): 2347-4572 Vol. 2, Issue 4, Apr 2014, 37-44
19. World Health Organization, Geneva, Report 2000.
20. Lambo E, Sambo G (2003) Health sector reform in Synthesis of country experience the Sub- Sahara Africa, East Africa. *Med. J.*, 80 (6) 10- 13
21. Newman D, Gloyd S, Nyangez MJ, Machoro Satisfaction with outpatient health care services in Manica province, Mozambique *Health policy and planning*; 13:174-80
22. Health policy of transitional government of Ethiopia. Artistic printers, Addis Ababa, September 1993; 21-38.
23. Tong D, Cung F, Wong D. Predictive factors in global and anesthesia satisfaction in ambulatory surgical patients. *Anesthesiology*, 1997; 87:856-64
24. Pineault R, Contandriopoulos Ap, Valoris M, et al. Randomized clinical trial of one day surgery. *Med care* 1985; 23:171-82
25. Kane RL, Maciejewski M, Finch M. The relationship of patient satisfaction with care and clinical outcomes. *Med care* 1997; 35:714-30.
26. Okolo SN, Ogbonna C, Bode-Thomas F. Healthcare service auditing and intervention in an emergency pediatric unit. *Nigerian Journal of Pediatrics* 2002; 29: 71- 74
27. Adane Assessment of client's satisfaction with outpatient services in Tigray zonal hospitals. AAU, 2006
28. White B. Measuring patient satisfaction: How to do it and why to bother. *Family Practice management*. 1999. Jan, [PubMed].
29. McMillian JR, Yonger Ms, Dewino LC. Satisfaction with hospital emergency department care as a function of patient triage. *HCMR*, 1986; 11:21-27.
30. Saal D, Hiedgger T, Nuebling M, Germann R. Does post-operative Visit increase patient satisfaction with anaesthesia care? *Br J Anaesth*. 2011; 107(5):703-9.
31. Klapfta JM, Roizen MF. Current understanding of patients' attitudes toward and preparation for anesthesia: A review. *Anesth Analg* 1996; 83: 1314-21
32. Colliver JA, Swartz MH, Robb's R. et al. relationship between clinical competence and interpersonal skills in standardized patient assessment. *Academic Medicine: Journal of the association of American medical college*, 1999; 20: 1085-1092.
33. Wu CL, Naqibuddin M, Fleisher LA. Measurement of patient satisfaction as an outcome of regional anesthesia and analgesia: a systematic review. *Regional Anesthesia Pain Med*. 2001; 26(3):196-208.

34. Thiedke CC. What do we really know about patient satisfaction? *Fam Pract Manag.* 2007;14(1):33–36
35. Kouki P, Matsota P, Christodoulaki K, et al. Greek surgical patients' satisfaction related to preoperative anesthetic services in an academic institute. *Patient Prefer Adherence.* 2012; 6:569-78.
36. Sanders LD, Gildersleve D, Rees LT, and White M. The impact of the appearance of the anesthetist on the patients' perception of preoperative visit. *Anaesthesia.* 1991; 46(12):1056-8.
37. Hsiao H. et al. Survey of short term patient satisfaction after surgery for OSA. *Med* 2009;32:212-9
38. Flierler JW, Nubling M, Kasper J, Heidegger T. Implementation of shared decision making in anesthesia and its influence on patient satisfaction. *Anesthesia.* 2013; 68:713–22.
39. Doborah L. Consumerism reflexivity and the medical encounter. *Soc Sci Med.* 1997; 45(3): 373-81.
40. Singh A. et al. influence of multilevel anesthesia care and patient profile on perioperative patient satisfaction in short stay surgical inpatients. *Indian J. Anaesth.* 2007;51(2):106-110
41. Prahlad Rai Sodani, Rajeev K Kumar, Jayati Srivastava, Laxman Sharma. Measuring patient satisfaction: a case study to improve quality of care at public health Facilities. *Indian J Community Med* Jan 2010; 35(1): 52-56.
42. Dina N. Baroudi, 1,2 Walid H. Nofal, 2,3 and Nauman A. Ahmad 4 Patient satisfaction in anesthesia: A modified Iowa Satisfaction in Anesthesia Scale 2010 4(2): 85–90.
43. Okolo SN, Ogbonna C, Bode–Thomas F. Healthcare service auditing and intervention in an emergency pediatric unit. *Nigerian Journal of pediatrics* 2002; 29: 71- 74
44. Adebayo E. and Diaro Patients compliance with instructions after oral surgery in Nigeria of community health and PHC, 2005; 17(1):38-4
45. Hall J.A., Dornan M.C. Patient socio-demographic characteristics as predictor of satisfaction with medical care: meta-analysis. *Social science and medicine.* 1990; 30: 811 8.
46. Newman D, Gloyd S, Nyangez MJ, Machoro Satisfaction with outpatient health care services in Manica province, Mozambique. *Health policy and planning*; 13:174-80
47. Yeshambel Agumas Ambelie, Amsalu Feleke Demssie, Measho Gbresslassie Gebregziabher. Patients' Satisfaction and Associated Factors among Private Wing Patients. 2014; 5, 2014, 417-423.
48. Gebremedhn. E Patient satisfaction with anesthesia with anaesthesia services and associated factors at the University of Gondar Hospital, 2013: 8:377
49. Shegaw A, Challi J, Tsion A, Mayur M. Desai. Changes in Inpatient Satisfaction with Nursing Care and Communication at 2004 2, 4, 2014; 171-176.
50. Belihun A, Alemu M, Mengistu. B A Prospective Study on Surgical Inpatient Satisfaction with Perioperative Anesthetic Service 2015 6; 3 8

Annex

ADDIS ABABA UNIVERSITY COLLEGE OF HEALTH SCIENCES

DEPARTMENT OF ANESTHESIA

I. INFORMED CONSENT SHEET ENGLISH VERSION

Written informed consent form before conducting the interview

Hello, how are you?

My name is **Abateneh Melekamayhu wahidi** I am currently doing thesis for the partial fulfillment of master's degree in AAU CHS Department of Anesthesia, I would like to interview you few questions about preoperative anesthetic evaluation provision of at menelik II referral hospital Addis Ababa Ethiopian. The objective of the study is to assess the level of patient satisfaction with the preoperative anesthetic evaluation of the hospital and to identify the factors affecting the satisfaction of patients in this hospital, which will be important to improve the preoperative anesthetic evaluation service delivery of the hospital. Your cooperation and willingness for the interview is very helpful in identifying the problems related to the issue. Your name will not be written in the form and I assure you that all information that you give will be kept strictly confidential. Your participation is voluntary and you are not obliged to answer any question you do not wish to answer. If you are not still comfortable with the interview, please feel free to stop it any time you like. Do I have your permission to continue?

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:

Mr. Abateneh Melekamayhu Phone No +251-911-831-969 romeabaty@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 _____

II. Questionnaire

Part I Socio-demographic characteristics inpatient that have undergone surgery under Anesthesia
January 6, 2016 to February 6, 2016 G.C at Menelik II Referral Hospital Addis Ababa Ethiopia

Instruction: read the following sentences aloud, clarify and listen to the patient attentively and circle the response (additional information can be referred from Patient card or anesthesia note)

Client identification Code

Code	Questions	Choices	Skip
101.	What is your age?	_____	
102.	What is your gender?	1. Male 2. Female	
103.	What is your Marital Status?	1. Single 2. Married 3. Divorced 4. Widowed	
104.	What is the highest grade or level of school that you have completed?	1. Illiterate 2. Read and writes 3. Elementary /1-8 4. Secondary /9-12 5. Diploma 6. If others specify _____	
105.	Residency	1. Urban 2. Rural	
106.	What is your job?	1. House wife 2. Farmer 3. Government 4. Private employee 5. Student 6. merchant 7. Other _____	
107.	Your family Monthly in come?	1. Less than 1000 birr	

		2. 1000-2000 birr 3. Greater than 2000 birr	
108.	Your health care coverage status	1. Paying 2. Free	
109.	Frequency of visit	1. New 2. Repeat	
110.	Have you Comorbid Diseases	1. Yes 2. No	
111.	If <u>no</u> 12 is yes circle what you have if you say no jump questioner 13	1. Asthma 2. Hypertension 3. Diabetes Mellitus 4. Psychiatric 5. Renal failure 6. Others (Specify)_____	
112.	ASA Classification Pleas feel from pre anesthetic sheet	1. ASA I 2. ASA II 3. ASA III 4. ASA IV	

Part II Factors related with Preoperative anesthetic evaluations of patients satisfaction with anesthetists,
January 6, 2016 to February 6, 2016 G.C at Menelik II Referral Hospital Addis Ababa Ethiopia

Please write (✓) in the space that is appropriate for you. Note that the questions in this section are about patients' opinions on services they have received.

Level of satisfaction (Likert's 5 point scale)

Variables		Strongly Agree (5)	Agree (4)	Neutral (3)	Disagree (2)	Strongly Disagree(1)
I	Physical facility					
201.	Neatness of preoperative assessment area?					
202.	There are enough waiting chairs in the Preoperative assessment area?					
203.	Preoperative clinic location is easy to find?					
II	Anesthetist communication skills					
204.	Anesthetists were punctual and Reachable?					
205.	Anesthetist introduces him/herself very well?					
206.	How do you get Anesthetists approach to you?					
207.	Anesthetists took your health history in detail?					
208.	The anesthetist considers your privacy during examination					
209.	Anesthetists explained to you about your type of anesthetic care plan?					
210.	The information given to me by the anesthetist was understandable?					
211.	Anesthetist was given fasting instruction clearly?					

212.	Anesthetist given you adequate Information about postoperative analgesia?					
213.	Information about PONV management was given?					
214.	Based on this experience, I have a good understanding of the role the anesthetist played in my surgery?					
215.	During the preoperative evaluation visit, did you have enough time to discuss your questions concerning anesthesia with the anesthetist?					
216.	I was satisfied with my anesthetic care plane?					
217.	To what degree did you have confidence in your anesthetist?					
III	Quality of the services					
218.	Chances in describing your health conditions?					
219.	You would recommend the services of this hospital friends or relatives?					
220.	In future, if you feel unwell, you will return to this hospital for services?					
221.	How would you rate the quality of care by the anesthetist?					

NOTE: At the end of this question, patients have the chance to report any other causes of dissatisfaction.

Any other dissatisfying events or complaints.....

Name of the interviewer.....

Sign.....date.....

III. Declaration

I undersigned declare that this student research paper is my original work and all the materials used for this study have been duly acknowledged.

Name of student ABATENEH MELEKAMAYHU WHIDI Signature _____

Date **June 9,2016**

This student research paper has been submitted for examination with my approval University advisor.

Name of advisor WOSENEYELEH ADMASU Signature_____

Date **June 9,2016**