

ST.MARY'S UNIVERSITY

SCHOOL OF GRADUATE STUDIES DEPARTMENT OF MBA

DETERMINANTS OF PATIENT SATISFACTION REGARDING HOSPITAL SERVICES: A STUDY OF MIGBARE SENAY GENERAL HOSPITAL

BY: YEABSIRA SOLOMON

JUNE 2023 ADDIS ABABA, ETHIOPIA

ST. MARY'S UNIVERSITY

School of Graduate Studies

DETERMINANTS OF PATIENT SATISFACTION REGARDING HOSPITAL SERVICES: A STUDY OF MIGBARE SENAY GENERAL HOSPITAL

By YEABSIRA SOLOMON

Approved by the Board of Examiners:

Dean, Graduate Studies	Signature
Advisor	Signature
External Examiner	Signature
Internal Examiner	Signature

ENDORSEMENT

This thesis has been submitted to St. Mary's University, School of Graduate St	ludies foi
examination with my approval as a university advisor.	
Research Advisor	
Dr. Tassw Shedga	

ACKNOWLEDGEMENTS

First and foremost, I would like to give my Glory and Praise to the ALMIGHTY GOD for his invaluable cares and having made me who I am today.

Next, from the bottom of my heart I would like to say big thank you for my uncle AtoTesfaye Kibret for his continuous support, motivation and strong encouragement in the whole process of my study and thesis work. Without his, this journey would not have been possible. Also, thank you to Etete, for the support she gave me.

I would like to express my sincere gratitude to my advisor, Dr. Tasew, for their invaluable guidance and support throughout my Master's program. Their expertise and encouragement helped me to complete this research and write this thesis.

I would like to thank the Department of Management at St. Marry University for providing me with the resources to pursue graduate study for my MBA.

I would like to express my sincere thanks to Ato Sintayehu Tefera, CEO of Migbare Senay Hospital, HR Department Head and all Migbare Senay Hospital and all Nurses for their excellent coordination and arrangement made during the actual data collection. And also my sincere appreciation is expressed to all respected patients for allowing and helping me to carry out this study.

I would like to thank all of the participants in my study for their time and willingness to share their experiences. This work would not have been possible without their contribution.

Finally, I would like to give my thanks to my beloved sister Kidist, Rahel, and Ruth respected families for their encouragement and support throughout my study.

Table of Contents

END	ORSEMENT	ii
ACK	NOWLEDGEMENTS	iii
List o	f Tables	vii
List o	f Figures	viii
ACR	ONYMS	ix
ABS	TRACT	X
CHA	PTER ONE	1
INTR	ODUCTION	1
1.1	Introduction	1
1.2	Background of the Study	1
1.3	Brief about the Hospital	4
1.4	Statement of the Problem	6
1.5	Objectives of the Study	8
1.5.1	General Objective	8
1.5.2	Specific Objectives	8
1.6	Research Questions	8
1.7	Significance of the Study	8
1.8	Scope of the Study	10
1.9	Limitations of the Study	10
1.10	Operational Definition of Terms	10
1.11	Organization of the study	12
CHA	PTER TWO	13
LITE	RATURE REVIEW	13
2.1	Theoretical Literature	13
2.1.1	The Concept of Patient Satisfaction	13
2.1.2	Nursing Care and Patient Satisfaction	14
2.1.3	Measurement of Patient Satisfaction	14
2.1.4	Determinants of Patient Satisfaction	14
2.2	Theories of Patient satisfaction	16
2.2.1	Green's Model of Patient Satisfaction	16
2.3	Empirical Literature	17
2.5.	Research Hypotheses	19

CHAI	PTER THREE	21
RESE	EARCH METHODOLOGY	21
3.1.	Introduction	21
3.2.	Description of the Study Area	21
3.3.	Research Design	21
3.4.	Population	23
3.5.	Sampling Frame	23
3.6.	Sampling Methods	23
3.7.	Instrument of Data Collection	25
3.8.	Data Collection Procedure	28
3.9.	Data Clearing	29
3.10.	Data Analysis	29
3.11.	Cronbach's Alpha for Reliability (Reliability analysis of the Questionnaire)	31
3.12.	Ethical Consideration	32
CHAI	PTER FOUR	33
RESU	JLTS AND DISCUSSION	33
4.1.	Introduction	33
4.1.1.	Descriptive Analysis	33
	Linear Regression Analysis	
4.2.	Questionnaire Return Rate	34
4.3.	Descriptive Analysis	34
4.3.1.	Descriptive Analysis of Socio-demographic Characteristics	34
4.3.2.	Descriptive Statistics for Experience of Patients towards Health Service (Independent Variable)	37
4.3.3.	Accessibility to Health Care Services	l 1
4.3.4.		
4.3.5.		
4.3.6.	-	
4.4.	Key Informant Interview Results	18
4.5.	Test Results for the classical linear regression model Assumptions	
4.5.1.	Correlation Analysis	
4.5.2.	Test for Heteroscedasticity	52
4.5.3.	Test of normality	52

4.5.4.	Test for Multicollinearity	53
4.6.	Linear Regression Analysis: Results and Discussions	54
4.6.1.	Effects of Health Care Service Dimensions and Control Variables on Patient Satisfaction (Factors Affecting Patients' Satisfaction at MSGH)	55
4.6.2.	Effects of Patient Satisfaction on the Intention to Recommend	57
4.6.3.	Regressing Patients' Satisfaction on the Service Quality Dimensions	58
4.6. D	viscussion	61
CHAI	PTER FIVE	66
CONC	CLUSIONS AND RECOMMENDATIONS	66
5.1.	Introduction	66
5.2.	Conclusion	66
5.3.	Recommendations	67
5.3.1.	Recommendations for Service Improvement	68
5.3.2.	Recommendations for Future Research	68
REFE	RENCE	70
Apper	ndix I: Survey Questionnaires (English Version)	76
Apper	ndix II: ለህጣማ የቀረበ ጣንይቅ (Amharic Version)	82
Apper	ndix III: Interview question for the Hospital's medical department heads and manage different level	

List of Tables

Table 1: The reliability analysis and internal consistency for the questioner	. 31
Table 2: Response Rate	. 34
Table 3: Number and Percentage of Socio-Demographic Characteristics	. 35
Table 4: Satisfaction of patient towards health services at MSGH	. 39
Table 5: Accessibility to Health Care Service	. 42
Table 6: Summary of the Patient Satisfaction Index	. 43
Table 7: Number and Percentages and Standard Deviation Score for Patient Satisfaction Item	n
	. 46
Table 8: Patient's Suggestions and Comments	. 47
Table 9: Correlation Matrix of Dependent variable and Explanatory Variable	. 51
Table 10: Variance Inflation Factor	. 53
Table 11: Regression Model Summary (Overall Satisfaction as Dependent Variable)	. 55
Table 12: Multiple Regression Analysis Test Result for All Variables (Overall Satisfaction a	as
Dependent Variable)	. 55
Table 13: Regression Model Summary (Intension to Recommend as Dependent Variable)	. 57
Table 14: The regression analysis result (Intension to recommend as dependent variable)	. 58

List of Figures

Figure 1: Simple Model for Case-mix Adjustment of Satisfaction Scores (Cited by Aydin	,
S.(2018))	16
Figure 2: Detailed Model for Case-mix Adjustment of Satisfaction Scores or Patient Repo	ort
Scores Cited by Aydin, S.(2018).	17
Figure 3: Conceptual Framework for measuring quality healthcare Adapted from the Ada	y &
Anderson's health symbol model	19
Figure 4: Test for Heteroscedasticity	52
Figure 5: Histogram	53

ACRONYMS

AHRQ Agency for Healthcare Research and Quality

CSA Charities and Societies Agency

ENT Ear and Nose Therapy

EOTC-CFAO Ethiopian Orthodox Tewahido Church - Child and Family Affairs

Organization

EPI Expanded Program of Immunization

HIV/AIDS Human immune Deficiency Virus/ Acquired Immune Deficiency

Syndrome

HVC Highly Vulnerable Children

IOM Institute of Medicine

MSGH Megbare Senay General Hospital

NGO Non-Government Organization

OPD Out-Patient Department

OVC Orphan and Vulnerable Children

SPSS Statistical Package for Social Science

VCT Voluntary Counseling and Testing Services

WHO World Health Organization

ABSTRACT

Patient satisfaction assessment is essential in obtaining a comprehensive understanding of the patient's need and their opinion of the service received. It is a fundamental tool in evaluating the quality of healthcare delivery service in hospital. This study was aimed to investigate the determinants of patients' satisfaction with the health care services provided by Migbare Senay General Hospital (MSGH) and to identify areas for improvement. This study employed a descriptive and exploratory type of research design. The participants in this study were drawn from patients admitted to the hospital using systematic sampling technique. Data from participants was collected using self administered semi-structured questioner and key informant interview. The level of patient's satisfaction at the Hospital was measured by 5 level Likert's scale. Linear regression analysis was applied to determine the factors affecting patient satisfaction. Out of 392 expected participants, 336 (85.71%) questionnaires were filled and returned. The descriptive analysis result shows that 69.63% of the patients were satisfied while 18.37% of them dissatisfied with their visit to the Hospital and 11.9% of patient were uncertain. With regard to assessing the association between Patient Satisfaction and multiple independent variables, it was found that physical facilities, registration service, doctor patient interaction, nurse patient interaction, availability and waiting time dimensions have a significant influence on patients' satisfaction at 95% confidence level and are the predictors of "Overall Patient Satisfaction". This indicates that there is a need to address this problem by management decision makers, planners, and other related staff to improve patients' satisfaction at the Hospital.

Key Words: Patients' satisfaction, systematic sampling, ordinal regression, health care services, Likert's scale

CHAPTER ONE INTRODUCTION

1.1 Introduction

This chapter focuses on the introduction of the study with reference to the disruption of the background of patient satisfaction. Problem statement will be illustrated to provide the reader with sufficient information to understand the problem in detail. Then, the objectives and the research questions; significance of the study; scope of the study; limitations of the study; operational definition of key terms, will be state and will conclude with organization of the study.

1.2 Background of the Study

The hospital has to cope with different stakeholders, who have their own interest at the hospital and where management has to deal with these, in order to improve the competitive advantage of the hospital. Hospitals today can reach this advantage through improvement of their processes on patient flow care, medical care, quality services and so on.

Patient's satisfaction refers to patients" general appreciation and understanding of the quality of provided health care service (Ziapoor et al. 2016). In the same views, Mohan and Sai Kumar (2011) regarded patient satisfaction as patients" perceptions of healthcare services they received. Concurrently, Shinde and Kapurkar (2014) defined patient's satisfaction as a patient's feeling of pleasure or disappointment resulting from the service outcome compared with their expectation

The concept of quality has several meanings depending on the stakeholder, from the point of view of patient and family, from management perspective, from Ministry of Health, Inspection, from professionals. This research is about the perception of patients towards quality service in the Hospital sector.

As defined by the World Health Organization (WHO), quality of care is the degree to which health services for individuals and populations increase the likelihood of desired health outcomes and are consistent with current professional knowledge. Health care quality is a level

of value provided by any health care resource, as determined by some measurement. As with quality in other fields, it is an assessment of whether something is good enough and whether it is suitable for its purpose. The goal of health care is to provide medical resources of high quality to all who need them; that is, to ensure good quality of life, to cure illnesses when possible, to extend life expectancy, and so on. (Wikipedia, the free encyclopedia)

There are several ways to improve quality care within hospitals. In general, a health care system has three primary goals: the provision of high quality care, access to the system, and limited costs. However, a more accessible system of high-quality care will tend to lead to higher costs, while a low-cost system available to everyone is likely to be achieved at the price of diminishing quality.

Patients' satisfaction with health care services is becoming an essential factor in health promotion, when patients are satisfied with healthcare services, it enhance quick recovery, patronage to the hospital increase resulting in more funds for service provision and medical tourism reduces. Also, satisfaction with care is an essential tool in the monitoring of the quality of health care (Maconkoet al., 2016). Also, the quality of care given to a patient can be influenced by patient's attitude to the health caregiver, and the caregiver's previous experiences with the patient (Haskins et al., 2014). Satisfaction with care is predictive of likelihood of patient to continue to use healthcare facility and adhere to medical advice and determinant of overall care coverage and effectiveness (Osiya DA et al., 2017).

The quality of health care services has great impact on patients' satisfaction. Onyeonoro et al. (2015) describe satisfaction with care to imply the degree of agreement between patient's perception of the care received and their expectation from the care relationship. Health care utilization had been found to be influenced by patient's satisfaction with care (Khamis & Njau, 2014). Expectations serve as the benchmarks by which patients assess systems performance during the care encounter and are central to both patient satisfaction and health system responsiveness (Mirzoev and Kane, 2017). In the words of Manzoor, et al. (2019) patient's satisfaction is the state of pleasure or happiness that the patients experience while using the health facility. Patients compare their perception of the care received with their expectation to give a judgment of their level of satisfaction. This made patient satisfaction care to be subjective

from the patient's point of view. Goyal, et al. (2016) submitted that when patients are not satisfied with the care received, they are likely to seek health care elsewhere. They further suggested that satisfaction with care may be a strong determinant of succeeding health-related behaviour and compliance with treatment and health outcome.

There is now broad agreement that health services should be comprehensive, accessible and acceptable, provide scope for community participation and available at a cost the community and country can afford (Park K., 2011). The data gathered by measuring patient satisfaction reflects care delivered by staff and physicians and can serve as a tool in decision-making. Patient satisfaction surveys can be tools for learning. They can also serve as a means of holding physicians accountable. Patient satisfaction data can also be used to document health care quality to accrediting organizations and consumer groups and can provide leverage in negotiating contracts. Probably the most important reason to conduct patient satisfaction surveys is that they provide the ability to identify and resolve potential problems before they become serious. They can also be used to assess and measure specific initiatives or changes in service delivery. Most importantly, they can increase patient loyalty by demonstrating you care about their perceptions and are looking for ways to improve (Sharma et al. 2014).

The Donabedian model is a conceptual model that provides a framework for examining health services and evaluating quality of health care. According to the model, information about quality of care can be drawn from three categories: "structure," "process," and "outcomes". Structure describes the context in which care is delivered, including hospital buildings, staff, financing, and equipment. Process denotes the transactions between patients and providers throughout the delivery of healthcare. It is the interaction between caregivers and patients during which structural inputs from the health care system are transformed into health outcomes. Finally, outcomes refer to the effects of healthcare on the health status of patients and populations. It can be measured in terms of health status, deaths, or disability adjusted life years, a measure that encompasses the morbidity and mortality of patients or groups of patients. Assessment of health care quality may occur on two different levels: that of the individual patient and that of populations. At the level of the individual patient, or micro-level, assessment focuses on services at the point of delivery and its subsequent effects. (Ameh et al. 2017).

This research was focused on the second part that is about the process within the Hospital, especially that part of the process where the patient comes in and stays during the care related to the treatment within the hospital. As the hospital is in a competitive environment, it is important to have a good image. With this chapter, some of general information regarding a brief background of the hospital was introduced accordingly. These basic backgrounds will help readers to get to know the general characteristics of the studied field. The rationale of the study, which gives the reasons why the study is implemented, the research problem, the study objectives and the significance of the study, will follow to help the reader to deeply understand the whole story.

1.3 Brief about the Hospital

Migbare Senay General Hospital (EOTC-CFAO/MSGH) was first established by the Ethiopian Orthodox Tewahido Church – Child and Family Affairs Organization (EOTC-CFAO) as a higher clinic in 1993 as a result of health-related challenges that encountered the Orphan and Vulnerable Children (OVC) and their guardians.

The Ethiopian Orthodox Church – Child and Family Affairs Organization (EOTC–CFAO) is a registered indigenous not for profit non-governmental Organization (NGO) established in 1973 by the wholehearted effort of great apostle. It was initially established in response to the growing number of orphaned and venerable children victimized by drought in Wollo, Tigray and Gondar areas in 1972/73.

EOTC-CFAO has been implementing various programs that benefit Highly Vulnerable Children (HVC) and their caretakers at all 19 project sites in five regional states, Amhara, Tigray, Oromia, and SNNPRG, Harari and in Addis Ababa City Administration.

Later on in 2006 the higher clinic was grown into a health center. Although the health center has been rendering laudable services to its clients, it was however not able to accommodate the growing number of patients because of shortage of the necessary infrastructure qualified and medical staff. This situation had led to a decision to raise the health center to a level of a general hospital. Based on the recommendations of the professional consultant and after having met all

their requirements set by the Ministry of Health (MOH), Megbare Senay health center was promoted to a level of a General Hospital in October 2009.

Megbare Senay General Hospital operating in Addis Ababa in strict conformity to the purpose it was established it provides with affordable payment medical care and treatment to communities in the neighborhood and to children under its supervision for free. Part of the income generated from the services provided by the hospital is used to help out children in difficult circumstances and build additional facilities and renovate the existing ones.

Currently the hospital implements activities such as; serves as a referral hospital for the children at the respective Child Care Centers, coordinates health related activities in most communicable and non-communicable diseases and provide with affordable price to the community in the surrounding area and beyond with preventive and curative medical services, deliver quality and standardized medical services to the community with affordable price, offers for free quality and standard medical services to the poor segments of the population in the vicinity of the hospital provided they produce supporting letter from their respective locality which shows their economic status, support the national effort of curbing the spread of the HIV/AIDS pandemic through the provision of Voluntary Counseling and Testing Services (VCT), get actively involved in the implementation of the Expanded Program of Immunization (EPI) and facilitate in collaboration with the Ministry of Health (MoH) vaccination activities, creates partnership with other philanthropic organizations in order to improve the knowledge, attitude, behavior and practices of the general public in the areas of environmental sanitation, personal hygiene and thus prevention of spread of preventable diseases.

The Hospital has 9 specialized clinical departments that include Internal medicine, Dermatology, Ophthalmology, Ear Nose Throat (ENT), Dental, Orthopedics, Pathology, Pediatrics, Bacteriology and Urology Departments.

Briefly, the hospital provides medical services to patients including Surgical Operation, Internal Medicine, Pediatric Services, Ophthalmologic Treatment, Dermatologic Treatment, Ear, Nose and Throat (ENT) Treatment, Gynecological Treatment and delivery services, X-ray, Ultrasound, Audiometry, Echocardiography, Laboratory Service, Pharmacy Service, Voluntary

HIV/AIDs Counseling and Testing, Treatment of Sexually Transmitted Infections (STIs) and Ambulance Service.

In addition, there are Para-Clinics such as: Internal Medicine Outpatient Department, Physiotherapy Department, Kinesio Therapy Department and last but not least three offices-Administration Office, Accounting Office, and Technique Office.

In order to achieve its objective the hospital is facilitated with 42 beds10 separate consultation rooms equipped with medical supplies and equipment, which are ready to serve the clients anytime. Regarding human resources, the hospital is staffed with 142 full time staff of these 1 is CEO, 71 are full time medical staff, 70 are support staff and 28 are part time medical doctors.

According to Hospital's 2022 performance Report 17,355 medical and 1,521 surgical patients were admitted in MSGH and supported/visited by full time health professionals. In 2022 the hospital had 71 full time health professionals (7 medical doctors, 45 nurses, 8 pharmacists, 9 laboratory technicians and 2 health officers), 28 part time medical doctors and 42 beds.

1.4 Statement of the Problem

Patient satisfaction is defined as the individual's positive evaluation of distinct dimensions of health care and is an important element in the evaluation of service rendered by a hospital (Melese et al., 2014; Narinder & Saini, 2013). Patient satisfaction is a measure of success of the service being provided by the health institution.

Not surprisingly, quality is defined in terms of technical delivery of care by clinicians (Bara et al. 2012). Reveals that the recent literature emphasizes the importance of the patient's perspective. However, hospital administrators, insurance companies, community groups and researchers have all begun to recognize the value of the insights that patients can provide (WHO, 2013).

In recent years, there has been a growing interest in patient satisfaction as a measure of outcome and quality of care. Patients seek quick and convenient services in health-care centres (Merkouris et al., 2013). For developing countries, using any such criteria to assess service quality introduces additional challenges given the inadequate research and the variety of

contextual factors that must be better understood (Best & Neuhauser, 2011). The meager literature on the measurement of quality healthcare service in Ghana and in other developing countries has warranted this study.

Research on quality healthcare has generally reported poor service delivery with respect to attitude of health providers as factors militating against patients" satisfaction with quality healthcare in Ethiopia. Feysia, et al. (2015) opined that due to inadequate nurse population ratio, scarcity of resources, incompetence and ineffective healthcare system, satisfaction with nursing care in Sub-Sahara Africa is low. In Ethiopia, Eyasu, et al. (2016) documented that satisfaction with nursing care was low while Sharew, et al. (2018) submitted that only half of the patients in their study were satisfied with nursing care.

As a rumor also, many patients have complaints about the services of both the Government and Private Hospitals in Addis Ababa. Health care that is perceived as less than quality can potentially discourage patients from using the available services. Probably the most important reason to conduct patient satisfaction surveys is that they provide the ability to identify and resolve potential problems before they become serious. They can also be used to assess and measure specific initiatives or changes in service delivery. They can identify those operations and procedures that require better explanation to patients. And most importantly, they can increase patient loyalty by demonstrating you care about their perceptions and are looking for ways to improve.

In order to have a competitive advantage hospitals should not only gain their important position through focusing on improvement of the service part of the patient (all medical treatment) but also through becoming more customers oriented, as patients should become more willingly to enter the hospital. It would be useful for healthcare providers to study how patients perceive their healthcare experience.

Patient satisfaction is an important and commonly used indicator for measuring the quality in health care. Patient satisfaction affects clinical outcomes, patient retention, and medical malpractice claims. It affects the timely, efficient, and patient-centered delivery of quality health care. Patient satisfaction is thus a proxy but a very effective indicator to measure the success of doctors and hospitals (M Beattie · 2015 · Cited by 326).

In this study, the researcher wishes to determine the level of patients' satisfaction in medical and surgical service given by MSGH and service improvements to increase customer loyalty for long term growth benefits.

1.5 Objectives of the Study

1.5.1 General Objective

The general objective of this research was to determine the factor affecting patients' satisfaction with the health care services provided by Migbare Senay General Hospital (MSGH) and to identify areas for improvement and make changes that benefit the service users (patients).

1.5.2 Specific Objectives

- a) To assess the over all level of patient satisfaction in the case of Migbare Senay General Hospital
- b) To determine the effect of physical facilities, registration services, physician-patient interaction, nurse- patient interaction, Pharmacy service, laboratory service and accessibility to health care service on patient satisfaction with the hospital services in Migbare Senay General Hospital.

1.6 Research Questions

- 1. What is the level of patient satisfaction on the health service at Migbare Senay General Hospital?
- 2. What are the factors affecting patient satisfaction with health care services?

1.7 Significance of the Study

Patient satisfaction is one of the essential indicators to monitor and evaluate the effectiveness and efficiencies of hospitals and their staff in order to improve healthcare service.

From that view, the patient satisfaction survey is an instrument in monitoring health care delivery of a hospital in relation to cost and services. Therefore, the quality of care indicates the quality of service of the hospital as perceived by the patients regarding various factors.

There are many reasons why critical access hospitals should evaluate patient satisfaction. Patients complain informally that doctors and nurses are too busy tending to the technical aspects of care to provide the much needed attention to patients' personal needs. Due to this they report that they receive less individual attention than ever before.

We are often the poorest objective judge of one's own appearance. It is also unusual for those around us to give unsolicited criticism about the need for improvement. Most people when receiving poor service or bad food at a restaurant don't complain, they just warn their friends and refuse to return. You can be blissfully unaware of any problem and patients remain unsatisfied.

There are a number of challenges health institutions may face with conducting patient satisfaction surveys. These include: tight budgets, lack of funding, lack of commitment from administration or staff, lack of in-house expertise to plan and manage task, lack of in-house resources. Due to one or more of the above reasons the MSGH did not conduct patient satisfaction study since its establishment.

As there is not yet much research in hospitals from developing countries, this research can contribute to the awareness of becoming more quality oriented in hospitals which will be in the advantage of the patient. In this study, the study seeks to determine the level of patients' satisfaction in Migbare Senay General Hospital, which is located in Addis Ababa.

The results from this study will help the board managers, decision makers, planners, business partners and other related staff to better understand the needs of patients and develop more adaptable and suitable policies to easily integrate and to generate quality healthcare within the hospital. Moreover, because of the lack of research conducted in this field within the developing countries, this study aims to make some significant contributions that will go a long way towards improving the quality of healthcare, customer satisfaction and loyalty.

The result of this evaluation will also serve as a benchmark for continuous quality improvement and patient satisfaction with health care services. It will also become an initiating document for other researchers to further discuss and improve the status of healthcare delivery services in the hospital.

1.8 Scope of the Study

This study is structured using a typical case study approach within the MSGH which is found in Addis Ababa Administration. The focus on this research is on the process of in- and outflow of patients in 2022 within the hospital by using questioner and interview and it analysed by Spss.

Even if MSGH hospital provides all basic services like pediatrics, medical, surgical and gynecological and other services, because the services are given by full time health professionals only medical and surgical patients was included in this study. Therefore patients visiting the hospital for outpatient and inpatient department were subjected to this research. It merely focused on services about entrance, attitude of practitioners, environment, and other attributes to make the staying pleasant.

1.9 Limitations of the Study

This research may experience limitations in the areas of limited information, limited time period for conducting the research and financial constraints.

Ideally this study should have been conducted by selecting the whole patients of the hospital. But time and financial constraints dictated a smaller sample. The researcher, besides being required to meet the full cost of the study, had very little time to collect data, compile and submit the report. These limitations, however, will not render the findings of this research non-reliable and replicable since the researcher carefully manages these limitations to make sure the research objectives will be achieved.

1.10 Operational Definition of Terms

Patients: refers to people waiting at Out-patient and In patient Department of the various units in the hospitals.

Satisfaction: is defined as the patient's experiences of services provided at the various hospitals.

Patient satisfaction: Patient satisfaction was defined as the patients' opinion about health care delivery services in Internal Medicine service of the Migibare Senay General Hospital.

Quality: refers to the patient's acceptable standards of care delivered to them at the various facilities.

Healthcare: refers service provision (delivery) to patients at the hospitals.

Patient experience: encompasses the range of interactions that patients have with the healthcare system, including their care from health plans, and from doctors, nurses, and staff in hospitals, physician practices, and other healthcare facilities. The terms patient satisfaction and patient experience are often used interchangeably, but they are not the same thing.

Dimension: Key service quality elements that predicts patient's satisfaction.

Tangibles: indicates the physical surrounding of the hospitals understudy.

Responsiveness: refers to the willingness of the staff to help patients and provide prompt healthcare service.

Reliability: refers to the ability of staff to provide service dependably.

Empathy: the caring attitude staff to patients at the hospital.

Culture: refers the language and religious barriers in healthcare delivery.

Assurance: refers to the knowledge and courtesy as well as the trust of staff to patients".

Communication: this indicates the provider patients" interaction.

Priority: this dimension indicates how university staff are prioritize in health service provision

Accessibility: this indicated the availability of the healthcare service in terms of financial access and proximity of facility to patients.

Affordability: this indicates that the cost of the service based on the patients' ability to pay.

1.11 Organization of the study

The research paper was organized in to 5 chapters. Chapter one introduces the entire study, beginning with a general background to the study, patient's satisfaction and quality healthcare. It also covered statement of the problem, research questions and objectives of the study. This chapter also discusses Significance of the Study, Hypotheses and Scope and limitation of the Study.

The second chapter of the study focuses on the discussion of theories relevant to patient's satisfaction and quality healthcare. Diverse review of relevant empirical literature was also contained in this chapter. The literature review was conducted based on the objectives of the study and this enabled the study to be grounded on empirical evidence in the literature so that convincing findings and conclusion will be drawn based on the stands of existing literature.

In chapter three, the researcher discusses the research methodology of the study. Again, this chapter explained and justifies the research paradigm under which the methods for the study were selected. It also covers sources of data, sampling techniques and the instrumentation, the study population and the scope of the study, the data gathering procedure and ethical considerations.

Chapter four presents findings together with the discussions; this enabled readers to follow the connection between the objectives of the study and research questions, the literature review, theoretical framework and the responses from respondents. Moreover, the prominent factors that affect quality healthcare will make clear with the regression model.

The chapter five of the study summarizes and concludes the entire study. Necessary recommendations were made to inform policy action and directives to ensure quality healthcare in the Hospital.

CHAPTER TWO

LITERATURE REVIEW

This chapter discusses theories in service quality that informed the conceptual basis for the framework of the study. It also contains review of empirical literature relevant to the study. This chapter has two main parts; the first part examines theoretical and the model foundations of the study as well as the selected model. The second part reviews empirical literature in accordance with the objectives of the study.

2.1 Theoretical Literature

2.1.1 The Concept of Patient Satisfaction

Patient satisfaction is a person's positive feeling of pleasure or disappointment resulting for comparing a product or services perceived performance or outcome in relation to his or her expectations (Anand, Kaushal, & Gupta, 2012; Rashmi & Vijakumar, 2010). Sodani and Sharma (2011) stated that satisfaction is defined as a consumer's emotional feelings about a specific consumption experience. It is judgment that a product or a services feature, the product or service itself, provide a pleasurable level of consumption related fulfillment.

According to Iftikhar et al. & Schoenfelder et at. (2011), patient satisfaction combines different aspects. Different authors defined patient satisfaction in different ways Iftikhar et al. (2011) defined patient satisfaction putting Emphasis on attitudes and perceptions of patients towards health services. In other words, it is the level to which patient perceives the effectiveness of health care service. While Mohan & Sai Kumar (2011) evoke the concept of patients' emotions and feelings of healthcare services delivered. Shinde and Kapurkar (2014) define patient's satisfaction as a patient's disappointment resulting from the health care service's outcome in relation to his or her expectations. For Schoenfelder et al. (2011), patient satisfaction is described as a patient's reaction to different aspects of his/her health care service experience. On the other hand, in defining patient satisfaction, Al-Abri & Al-Balushi (2014), and Iftikhar et al (2011) brought the idea of the degree of congruence between patient expectations of ideal care and their perceptions of real care received during a treatment process. Considering these different aspects, patient satisfaction is helpful to understand the need of the patient. It is

considered as a crucial instrument to evaluate the effectiveness of health care services delivery. Then, collecting the information on patient's satisfaction with health care services could contribute to the identification of the gaps in health care services and to the development of successful mechanisms to improve health care services Al-Abri& Al-Balushi (2014).

2.1.2 Nursing Care and Patient Satisfaction

From the study conducted by Jilisa (2014) nursing care services is essential in a health care setting as the nursing staff comprises the majority of hospital staff. They play a critical role in patient satisfaction and they spend more time in day-to-day activities of the unit rather than physicians. Then, according to this author, patients have the right to expect from them the best services.

2.1.3 Measurement of Patient Satisfaction

According to Al-Abri & Al-Balushi (2014). Assessing patient satisfaction with health care is a tool establishes the mechanisms to improve the health care services. The authors differentiate two approaches for evaluating patient satisfaction: qualitative and quantitative. Linda (2012) stated that consistent questionnaires (either self-reported or interviewer-administrated or by telephone) are the most common assessment tool for conducting patient satisfaction studies. According to (Al- Abri and Al- Bulushi 2014), there are two standardized, reliable and valid instruments for measuring patient satisfaction such as patient satisfaction questionnaires (PSQ-18) and customer assessment health plans (CAHPS).

2.1.4 Determinants of Patient Satisfaction

Some patients should not be satisfied with some aspect of health care service they receive. They should account some challenges such as their experience within a hospital environment, access services, the admissions procedure, nurses and other personnel services, the services they receive in their rooms and other services before they leave the hospital Powell (2011). From this study, it is found that the level of patient's satisfaction with nursing services ranged from 1.95 to 2.64 n a 5 point scale and overall satisfaction with physician services was 2.41 on a 5 point scale. Naseer, Zahidie and Shaikh (2012) summarized these aspects in three indicators to measure patient satisfaction. These indicators are structure, process, and outcome. Structure indicators are composed by medical and nonmedical determinants. Medical determinants are

based on health care system (doctors and paramedic staff, training and equipment). Nonmedical Determinants are composed by physical infrastructure. Process indicators according to Naseer et al (2012) refer to the activities of health care staff in their treatment, and outcome indicators refer to the consequences that might happen. Naseer et al (2012) and Rodrigues et al (2012) evocated other main determinants of patient satisfaction which are interrelated and interconnected with each other. These determinants are patient expectations when admitted to the hospital, perceptions of the care they receive at the hospital, and patient experiences with health care system. These domains are and can simultaneously affect patient satisfaction. According to Naseer et al (2012), with patient's expectations determinants, the patient compares his/her own experience of health care with his/her expectations to measure his/her satisfaction. The authors differentiate three categories of patient expectations: background expectations which result from the treatment processes. Interaction expectations which refer to patient expectation on intercommunication between patient and health care staff and lastly, action expectation which is about the doctor's activities such prescribing, referral or advice from a doctor.

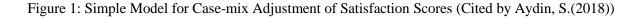
From the survey conducted by Karachi and Vadhana (2012), patients with lesser expectations usually have higher satisfaction rates. From the literature, these expectations are influenced by patient characteristics (age groups, gender, standards of living and marital status and psychosocial determinants Naseer et al (2012), Vadhana (2012). According to Afzal et al (2014), Naseer et al. (2012), a higher level of education is associated with lower level of patient satisfaction. Female tend to be lesser satisfied compared to males. Educated patients are more satisfied than the no educated patient. The low social class was found to be more satisfied with the treatment provided as compared to people from higher social class.

According to Naseer et al (2012) and Iftikhar et al (2011), patient perceptions are influenced by the socio-cultural background of patients (beliefs, attitudes, and level of understanding). To perform his activities in health care setting, the doctor has to understand expectations and social context of the illness of his client. The nurse- patient relationship has been also highlighted by Casey and Wallis (2011) which shows the nursing staff should make effort to maintain effective communication with patients. It may be concluded that responsiveness of the health care system is a crucial aspect of achieving nursing care satisfaction.

2.2 Theories of Patient satisfaction

2.2.1 Green's Model of Patient Satisfaction

Green's model of patient satisfaction proposed that patient characteristics and healthcare provider determine patient satisfaction as two separate groups of variables (see Figure 1). To keep from having an over-adjustment problem, the model also proposed a detailed model by examining the details explaining how patient characteristics affect patient satisfaction, such as patients' expectations about care, feelings, rating of healthcare, and their tendency to praise or criticize Cited by Aydin, S.(2018).



The added tendency in the detailed model is to provide a positive opinion of the depicted model (see Figure 2). Patient characteristics are linked with experience of health, expectations regarding care, type of healthcare received, and tendency to provide a positive opinion. Rating of healthcare or reports of healthcare are influenced by these intermediate variables (Cited by Aydin, S.(2018)).

Figure 2: Detailed Model for Case-mix Adjustment of Satisfaction Scores or Patient Report Scores Cited by Aydin, S.(2018).



2.3 Empirical Literature

Numerous studies on assessing patient satisfaction on health care delivery were reviewed to understand the concept of patient satisfaction. The study carried out in the USA on patient satisfaction with nursing care their receive in deferent working environment, Kutney-lee et al (2010) found that in better working environment, 69.9% of patients are satisfied with nursing care services their receive while in poor environment only 59.6% of patients were satisfied with nursing care they receive. It has been concluded that the environment can impact on patient satisfaction according to how it is better or poor. In India, Shinde and Kapurkar (2014) in their study 65% of patients in obstetrics/gynecology and medicine were satisfied, while in surgery, 64% of patient was satisfied. The same results have been shown in the study conducted by Zhao & Akkadechanunt (2011) in Chinese where patients presented the lower level of satisfaction with nursing care (2.51%) when patient do not receive an honest and humorous nurses response. The study done in Germany has revealed that the kindness of nurses, quality of food and accommodation, discharge procedures contribute enormously to patient satisfaction in Germany

Schoenfelder et al (2011). The findings suggest that measuring patients, satisfaction is more important to improve nursing services. In the study carried out by Legesse et al. (2016) in Ethiopia, it is shown that the overall satisfaction level of the patients with nursing care was 47%. Feysia, et al. (2015) opined that due to inadequate nurse population ratio, scarcity of resources, incompetence and ineffective healthcare system, satisfaction with nursing care in Sub-Sahara Africa is low. Eyasu, et al. (2016) documented that satisfaction with nursing care was low while Sharew, et al. (2018) submitted that only half of the patients in their study were satisfied with nursing care.

The research carried out in Chinese hospital on exploring patients" perceptions of quality nursing care, patients demonstrated lower level of satisfaction (2.51%). On the other hand, Tarus et al (2014) shown that the time a patient spends in the hospital was significantly associated with patients' satisfaction with care given. The findings from the research done by Schoenfelder et al (2011) indicate that some aspects of the hospital do not contribute to the patient satisfaction. It is suggested that patients' perceptions of care are more important determinants of the totality of patient satisfaction with the health care services. Assessment of patients' satisfaction with nursing care within referral and teaching hospital is a legitimate indicator of improving the services and strategic goals for all healthcare organizations.

2.4. Conceptual Framework of the Study

The conceptual framework indicates the crucial process, which is useful to show the direction of the study. The study shows the relationship between the five service quality dimensions (Physical facilities, Physician-patient interaction, Nurse-patient interaction, Responsiveness of Hospital staff and Accessibility to health care service) and patient satisfaction.

Figure 3 shows the conceptual framework using the general accepted health system model for construction of conceptual framework by Aday and Anderson, cited by Mao Vadhana (2012), which was mentioned in their study of satisfaction of people towards health care delivery in United State. The purpose of utilizing this model is to help construct a questionnaire with a good reliability and to secure a high degree of validity, which means that the questionnaire had strong internal consistency and was constructed to measure what it, was supposed to measure.

Figure 3: Conceptual Framework for measuring quality healthcare Adapted from the Aday & Anderson's health symbol model

The dependent variable correspond to the study is patients' satisfaction where as the independent variables are the factors influencing patients' satisfaction that includes socio-demographic characteristics of the patients, experiences of patients with the health care service, accessibility to health care service, financial aspects, and others.

2.5. Research Hypotheses

In light of the objectives expressed above, the following hypotheses were investigated:

The study comprises of seven hypotheses.

Hypothesis 1: A physical facility has a positive effect on patient satisfaction.

Hypothesis 2: Doctor-patient interaction has a positive effect on patient satisfaction.

Hypothesis 3: Nurse-patient interaction has a positive effect on patient satisfaction.

- **Hypothesis 4:** Accessibility to health care has a positive effect on patient satisfaction.
- **Hypothesis 5:** Patients with lower education are more likely to show a higher level of satisfaction.
- **Hypothesis 6:** Patients with older age are more likely to show a higher level of satisfaction.
- **Hypothesis 7:** There is no relationship between customer satisfaction and positive word of mouth (recommendation of hospitals to others).

CHAPTER THREE

RESEARCH METHODOLOGY

3.1. Introduction

This chapter discusses the methodological issues involved in the study. It begins by defining the broad paradigm within which the study is situated. This section further discusses the approach that was used to address the research questions. These methods are captured as the research approach, design, source and type of data, the sampling and sampling technique, sample size, study site, instruments that was utilized in collecting data, method of data collection and finally the method of data analysis was intensively presented.

3.2. Description of the Study Area

This study is structured using a typical case study approach within the Migbare Senay General Hospital (MSGH) which is found in Addis Ababa Administration. The focus on this research is on the process of in- and outflow of patients in 2021/22 within the hospital.

3.3. Research Design

Creswell, (2014) explains "Research design are the specific procedure involved in the research process: data collection, data analysis, and report writing". In other words, the research design sets the procedure on the required data, the methods to be applied to collect and analyze this data, and how all of this is going to answer the research question (Payne, K., & Grey, L. (2014). It is a framework that includes the methods and procedures to collect, analyze, and interpret data.

The researcher interested to present the opinion of patients regarding healthcare services in Migbare Senay General Hospital. Therefore, this study was employed a descriptive and exploratory, type of research design, with self administered semi-structured questioner type of research and survey research strategy in collecting primary data. The reason behind using descriptive research design is because the researcher is interested in describing the existing situation under study.

Descriptive research aims to accurately and systematically describe a population, situation or phenomenon. It can answer *what, where, when and how* questions, but not *why* questions. A descriptive research design can use a wide variety of research methods to investigate one or more variables.

Sources and Type of Data

In order to achieve the objective of the study, the research approach used in this study was both qualitative and quantitative type of data. Quantitative research focuses on determining the relationship between variations of independent and dependent variables.

With regard to the sources of data, the study used both primary and secondary source of data. Based on the nature, scope, objectives and availability of time and resource, the researcher used questionnaires and secondary data source like books, existing research papers, journals and publication, websites, MSGH reports.

Primary Data Sources

To gather primary data structured questionnaires was prepared in English and translated to Amharic before they are distributed. The questionnaires have five parts: The first part of the questionnaire is about the personal information of respondents. The second section is designed to measure the experiences of patients with the health care service. The third part of the questioner is about accessibility to health care Services, the fourth section is about the general patient satisfaction and the last part is suggestions or comments for the improvement of the hospital's service.

Secondary Data Sources

Necessary documents were also reviewed to get required secondary data. Official reports, study documents and publications were important sources of secondary data.

3.4. Population

According to Bhandari, P. (2020), the definition of population is the entire group that we want to draw conclusions about. The target population is defined as the total set of elements of interest being investigated by a researcher.

MSGH is selected as the study site. This hospital is one of several hospitals in Addis Ababa City Administration. The study population includes 18,876 patients who were admitted to the Medical and Surgical wards and visited by full time health professionals.

The study population for this research is therefore, those who were admitted to the Medical and Surgical wards in Migbare Senay General Hospital (MSGH) in 2022. Sample was out-patient and inpatient who consumed the services of the hospital and were available at the time of data collection. Parents or grandparents were the respondents of patients whom their age less than 15 years old.

3.5. Sampling Frame

The sampling frame for this study is the lists of patients who are admitted to the Medical and Surgical wards at the time of data collection which is estimated to be the estimated average population number per day (71) times number of data collection days (20) which is equal to 1,420.

3.6. Sampling Methods

Sample Size Determination

Sample size is actually the total number of units which are to be selected for the analysis in the research study.

As it is described in scope of the study section the medical and surgical patients were included in the study. In 2022 17,355 medical and 1,521 surgical patients were admitted in MSGH and supported/visited by full time health professionals.

In order to determine sample size; the researcher used a formula developed by Taro Yamane for calculating the required sample size in the hospital.

It is calculated as follows

$$n = \frac{N}{1+N} (e)^2$$

Where

n - is the sample size

N - is the population size (18,876)

e - is sampling error (0.05)

Substituting the values in the formula; <u>18,876</u> = <u>392</u>

 $18.876(0.05)^2$ 48.19

Hence; the total sample size is 392 since the number of people in each service was not the same, this need to proportionate for each and calculated using the following formula.

$$n_1 = \frac{n N_1}{N}$$

Where: n_1 is total number of sample in each service

n is total number of sample

N is total number of population

N₁ is total number of population in each service

$$n_1 = \frac{n*N_1}{N} = \frac{392*17,355}{18,876} = \frac{360}{1}$$

$$n_2 = \frac{n N_2}{N} = \frac{392*1521}{8,876} = \frac{32}{8}$$

Therefore, the sample was consisted of 360 medical (91.84%) and 32 surgical patients (8.16%).

Sampling Techniques

According to Hamed T. (2016), sampling is taking a subset from chosen sampling frame or entire population is called sampling. Sampling can be used to make inference about a population or to make generalization in relation to existing theory. It is also advantageous in time consuming and cost saving.

The study employed both probability and non-probability sampling method to select the research respondents. Thus the researcher selects Migbare Senay General Hospital by using purposive sampling method (non-probability sampling) because the hospital is owned by the organization that my uncle working in and it is strong desire of the organization to conduct the patient satisfaction study because no such study was conducted since its establishment/conception. Representative patients to fill survey questionnaire was selected from both medical and surgical department based on systematic sampling (probability sampling).

So In order to obtain statistically significant representatives of the population a systematic random sampling was applied to draw the patients in order to get information about the aspects of those health services. Patient was selected one within a k interval.

The value for sampling interval Kth was calculated by using the following formula:

$$K = \frac{a * d}{n}$$

Where: k: the sampling interval.

a: the estimated average population number per day

d: number of data collection days

n: the sample size.

Assuming that there is 265 working days per year the estimated average patient population per day was assumed to be 65 for medical and 6 surgical patients.

Thus,
$$K = \frac{(65+6)*20 \ days}{392} = 4$$

Therefore, the researcher selected every fourth patient from the estimated average population available at the time of data collection. With this fact on an average the researcher have selected about 20 patients every day to fill the questioner. Moreover, samples were collected in all shifts of working hours to ensure the proper distribution of patients who represented the total population.

3.7. Instrument of Data Collection

a. Questionnaire

The research instrument used by the researcher in collecting data was a pre-structured questionnaire adopted from a previous patient satisfaction research implemented by Amin Khan

Mandokhail and the patient satisfaction questioner - III (PSQ-III) developed by Ware, Snyder, Wright, & Davies and reproduced by Wilkin and others.

A preliminary questionnaire was first developed in English, and then translated into Amharic which is used locally in the study area and again re-translated in English to verify the correct interpretation. All items in the questioner scored on a five-point Likert's scale. For the 60 ordinal level variables, ex-patients was asked to indicate their degree of agreement or disagreement with a statement regarding hospital care by marking a cross/right to indicate "Strongly Disagree", "Disagree", "Agree", "Strongly Agree" or "Undecided."

Positively framed question was used and a response was then coded as follows: "Strongly Disagree = 1," "Disagree = 2," "Undecided = 3," "Agree = 4" and "Strongly Agree = 5."

This research instrument was pre-tested before using it for the study to arrive at appropriate wording, format, length and sequencing of the questions. A pretest of 39 questionnaires was conducted in the Hospital with very similar background of patients to that of the actual data collection for its reliability and the questionnaire was also tested for its content validity by the experts who have expertise in such a research area. In pretest, the value of Cronbach's alpha coefficient for expectation, attitude, and satisfaction parts were 0.79, 0.63, and 0.93 respectively. As the Cronbach's alpha coefficient for attitude section was not high, the questionnaire was modified specifically question number sixth of the section in order to increase the level of reliability.

The questionnaires have four parts: The first part of the questionnaire is about the personal information of respondents. The second section designed to measure the patient's perception about the health care service. The third and fourth part of the questioner is about accessibility to health care service and the financial aspects of the hospital respectively. The fifth part is about the general satisfaction of the patients. The last part is about the Suggestion and comment for the improvement of the hospital's service.

The 6 parts of the questionnaire is detailed as follows.

1. Socio-demographic characteristics of the patients,

- 2. Experiences of patients with the health care service
 - a. Physical facilities
 - b. Experiences with Registration
 - c. Physician-patient interaction
 - d. Nurse-patient interaction
 - e. Experiences with pharmacy
- 3. Accessibility to health care service
 - a. Availability
 - b. Waiting time
 - c. Financial Aspects
- 4. General Patient Satisfaction towards the health care service
 - a. Convenience
 - b. Courtesy
 - c. Quality of care
- 5. Suggestion and comment for the improvement of the hospital's service.

In appendix A, the English version of the questionnaire is included.

b. Key Informant Interview

To supplement the Health service Survey and the Secondary Data Analysis components the interview incorporates input from key informants representing the management of the Hospital, medical directors, heads and HR Managers. So that the researcher contacted three different medical ward heads and medical director as well as human resource managers.

c. Document Review

Secondary data from materials such as reports, journals and internet was used to back up primary information and relate the findings to other approaches already in existence. The method used document checklists and guides to get views from other writer which was instrumental especially in comparison analysis and literature review.

Some necessary secondary documents such as organizational structure, policy structure, personnel documents, performance and evaluation reports was collected during the inside-office research.

3.8. Data Collection Procedure

Required data was collected from both primary and secondary sources, which complement each other. It was begin by secondary data analysis through the detailed review of related literature.

Before data collection the researcher had sought permission for study from Migbare Senay General Hospital. Then the CEO of the Hospital agreed to conduct the study.

For data collection 2 qualified personnel was recruited. The Researcher supervised the data collecting teams at the hospital and assisted them with obtaining the list of patients to be sampled as well as engaged in data collection. The survey run for twenty days, on average 20 questioners were distributed per day.

The data collectors were informed about the study by the researcher to have a clear understanding and unbiased approach to the data collection process. To make the data collection effective respondents were requested to give consent to participate voluntary after detailed explanation that there were no physical psychological or social risk associated with participation in the study. The explanations were verbal. The confidentiality of information was safeguarded in such a way that the participant information was exposed to the public. Each respondent handled his/her questionnaire privately. There was no individual identity label on the questionnaire. If the patient is unable to participate, the interviewer was looking for the attendant who is with the patient most of the time was seek for. Then, participants were asked to rate their satisfaction with various aspects of health care at the hospital by selecting only one number that best described their opinion on each item of the scale.

To conduct data collection, the researcher select a sample with a four-patient interval as it is already done the calculation and obtain data via personal interviews at the hospital premises on the day of visit for outpatients and on the day of discharge for inpatients.

3.9. Data Clearing

The survey strategy has some limitation for example low response rate from respondent, some questionnaires are not completely answered and responses could be biased (Saunders et al., 2009, p. 144). As we used this method so there was risk of getting back incomplete questionnaires. It may be due to respondent have less time or ignored to answer all the questions. One other factor is language barrier, which can affect the data; in fact this problem is resolved by translating the questionnaire into Amharic.

Due to the problem of uncompleted questionnaires, it is always good to see how to sort out to avoid problems in analysis of uncompleted questionnaire.

In this study least people were not willing to fill the questionnaire. And some of them filled it partially. Due to this the collected questionnaire were thoroughly checked and only those questionnaires which are filled more than 90% were selected and leave out the rest questionnaires.

Out of the distributed 392 questionnaires 56 found to be incomplete or not filled at all. Thus, in this study 329 questionnaires, 297 out patients and 39 inpatients, were considered. This indicates that the response rate found to be 85.71%.

3.10. Data Analysis

In this study different methods are used to analysis the data such as descriptive and inferential statistics. Correlation is used to test the relationship between different variables whether there is positive, negative or moderate relationship. In addition liner regression analysis is applied on the data to evaluate the relationship of dependent and independent variables that showed how much dependent variable vary due to independent variables.

Information obtained from questionnaires and document analysis was coded and updated on a coding framework. Qualitative data was descriptively analyzed while quantitative data was analyzed using a statistical package (SPSS).

Therefore, linear regression was used to predict dependent variable, patient satisfaction in the hospital, given various independent variables. Having carried out or linear regression, the researchers have tried to determine which of the independent variables have a statistically significant effect on the dependent variable.

Data Analysis Procedures

The completed questionnaires were edited for completeness. The data obtained from the respondents was coded and imported into computer using statistical program SPSS (Statistical Package for the Social Sciences) version 20.0 to quantify and analyze the information.

Before proceeding to the data analysis Cronbach's Alpha was applied in order to evaluate the internal consistency of the instrument and checked whether the data collected was reliable or not. Based on calculated Cronbach's alpha the results found to be high enough to ensures the reliability of the questionnaire and proceed to the analysis.

To analyze data there are different methods for every research study, i.e. quantitative and qualitative data analysis procedures. A qualitative data analysis procedure allows us to develop a theory from our data (Saunders et al., 2009, p. 480), while in a quantitative data analysis, data is already collected from the surveys enables us to explore, present, describe and examine relationships and trends within the quantitative study (Saunders et al, 2009, p. 414).

The researcher used both descriptive and linear regression statistics in order to analyze the data of this study. By using descriptive statistics, data were put in tables and graphs to summarize the data collected for better understanding to the reader to easily examine the results (Agresti & Finlay, 2009, p. 4). For the presentation of descriptive statistics of the study bar, pie charts and cross tabulation was used. These tools helped us as well to understand and examine the results in a better way.

In order to generalize and do some prediction on the basis of the results of the collected data inferential statistics used (Agresti & Finlay, 2009, p. 4). There are many statistical tests that can be applied for inferential statistics; this study used linear regression analysis to test the hypotheses and the relationship between dependent and independent variables. The reason for this choice of test is that line regression allows us to determine the overall fit (variance explained) of the model and the relative contribution of each of the predictors to the total variance explained.

Finally all the outcomes were marked out and the study concluded the recommendations for further research.

3.11. Cronbach's Alpha for Reliability (Reliability analysis of the Questionnaire)

Before deciding on adopting a survey, the variables should be checked for psychometric properties, reliability and internal consistency. To investigate the stability, consistency, and robustness of the instrument in this research, an analysis of reliability and internal consistency was conducted. Internal consistency has been widely used as a metric for assessing the reliability of surveys. The computation of the reliability analysis generates a number referred to as the Cronbach Alpha. It describes how closely all items on a survey are related. According to George and Mallery (2019) the analysis output is interpreted as Excellent if α >.9, Good if α >.8, Acceptable if α >.7, Questionable if α >.6, Poor if α >.5 and Unacceptable if α <.5.

The below table 2 demonstrates the reliability analysis and internal consistency for the questioner. Results indicate that the instrument possessed strong reliability which is good; the alphas for the perceived ones were 0.951. Needless to say, the alphas obtained from the two halves, the first 33 items and second 32 items in each portion, respectively, are also higher than the 0.8 cut-offs. Overall, the service quality questionnaire in its entirety is reliable.

Table 1: The reliability analysis and internal consistency for the questioner

	Reliability Statistics					
	Cronbach's Alpha	N of Items				
Total Alpha (65)	.951	65				
Split-Half Part 1 (33)	.858	33				
Split-Half Part 2 (32)	.944	32				

3.12. Ethical Consideration

Before any attempt to collect data, approval to conduct the study was obtained from CEO of the MSGH. Also, each participant (patient) was notified about the purpose of the study, the right to refuse to participate in the study, and anonymity and confidentiality of the information gathered. The study has taken inputs from the interested participants only and explained participants right to withdraw at any time when felt inconvenience of participation. They were assured that they would not be penalized for not participating if they wished not to participate, and that their responses to the questions would have no effect on their care. Furthermore they are assured that no information is changed or modified, hence the information is presented as collected for the purpose of this study.

At most effort is also exerted to keep the study free from bias, abuse, misconduct and fraudulent acts and practices.

CHAPTER FOUR

RESULTS AND DISCUSSION

4.1. Introduction

This chapter of the research presents the main results, thus the thematic areas of the presentation involve: socio-demographic characteristics of patients, service quality dimensions and patient satisfaction as well as an association between dependent and independent variables.

The study covered 336 out of the target population of 392 respondents intended in data collection in respect to factors affecting patient satisfaction at Migbare Senay General Hospital.

Individual overall satisfaction scores were computed for each of the 336 out of the targeted 392 respondents who are expected to be included in the data collection. The data were collected from 23rd April to 25th May 2023 on average about 20 patients were selected randomly per day. Structured questionnaires were facilitated by two fresh graduates, for data collection. Within this time 39 inpatients and 297 out-patients were interviewed.

Results are hereby presented in descriptive and tubular forms. They are presented in the followings sections:

4.1.1. Descriptive Analysis

- i) Socio-demographic characteristics
- ii) Experience of patients towards health service
- iii) Accessibility to health care service
- iv) Analysis of Dependent Variable (Patient Satisfaction)
- Suggestion and Comments from the Respondent Regarding the Health Services of MSGH

4.1.2. Linear Regression Analysis

- i) Factors affecting patients' satisfaction at MSGH.
- ii) Association between patients' satisfaction and intention to recommend variables.

4.2. Questionnaire Return Rate

For the study 392 respondents were targeted to participate in the study. The respondents were introduced to the study and informed about its purpose and then their consent was sort to participate. Those who gave the consent filled the questionnaire and retuned it back to the data collector. Thus of the 392 patients to whom the self-administered questionnaire was distributed, 375 were returned. However, only 336 were duly completed and analyzed. This converts to a response rate of 85.71% as shown in the summary Table below.

Table 2: Response Rate

Response	Frequency	Percentages (%)
Returned	336	85.71
Unreturned	56	14.29
Total	392	100

Source: Research data (2023)

The Table 2 reveals that return rate of 85.71% and non response rate of 14.29%. According to Mugenda, O. M., & Mugenda, A. G. (2013) a response rate of 70% and above in social sciences is considered sufficiently high and appropriate. The sample frame was a list of all MSGH patients visiting the Hospital during the month of March 2023 when the research was conducted. Findings from this study are presented in subsequent sections.

4.3. Descriptive Analysis

4.3.1. Descriptive Analysis of Socio-demographic Characteristics

A total of 336 respondents were sampled for the study as indicated in table 3. The information included age groups, gender, marital status, educational background, occupations, monthly income, and the number of visits to the Hospital.

Table 3: Number and Percentage of Socio-Demographic Characteristics

Variable		Frequency	Percentage
In or Out Patient	In Patient	39	11.6
in or Out Patient	Out Patient	297	88.4
Condon	Male	145	43.2
Gender	Female	191	56.8
	< 18	5	1.5
	18-30	94	28.0
Aga (Vagra)	31-40	109	32.4
Age (Years)	41-50	51	15.2
	51-60	55	16.4
	> 60	22	6.5
	Single	100	29.8
Manifel Chatan	Married	194	57.7
Marital Status	Divorce	22	6.5
	Widowed/Separated	20	6.0
	Illiterate	17	5.1
	Primary	32	9.5
	Secondary	52	15.5
	High School	46	13.7
Educational Level	Post-graduate	51	15.2
	Diploma	52	15.5
	BA/BSC	58	17.3
	MA/MSC	25	7.4
	PHD	3	0.9
	No any income	68	20.2
	<2,000	10	3.0
Monthly Income	2,001-5,000	171	50.9
	5,001-10,000	43	12.8
	>10,000	43	12.8
	Student	16	4.8
	Unemployed	32	9.5
	Self-employed	128	38.1
Occupation	Government Staff	70	20.8
	Farmer	27	8.0
	Company Staff	31	9.2
	NGOs' Staff	32	9.5
	First Time	134	39.9
Number of Visits	2-4 times	133	39.6
	>4 times	69	20.5
	Personal Finance	293	87.2
Who Paid Treatment Fee	Government	12	3.6
	NGO	31	9.2

As it can be seen from the above table, the majority of the respondents were male (56.8%). Hence, a slightly higher percentage of females responded to the questionnaire as compared with the male respondents and female's dominance in visiting the hospital.

According to the Table 3, respondents under 18 years of age represented 5 (1.5%) of the sample size; 94 (28.0%) of the respondents were aged between 18-30 years old; whereas 109 (32.4%) of the respondents were aged between 31-40 years old, 51 (15.2%) were between the age 41 and 50 years while 55 (16.4%) were in the age bracket of 51 and 60 years old and finally 22 (6.5%) were 61 and above. As we can see from the Table, most of the respondents were between the ages of 31 and 40 followed by the second largest group of respondents were between the ages of 18-30, just 5 (1.5%) were recorded as the smallest group of respondents with age under 18.

The result on marital status showed that the customer's attitude towards visiting the hospital is higher for married (57.7%). A result that shows couples people are more likely to use services rendered by the hospital than singles. It may simply indicate a high likelihood for married to visit the hospital as compared to single people.

The findings also imply shows that majority of the respondents hold either a bachelors degree (17.3%) or Diploma holders (15.5%). Thirdly, a total of 51 respondents (15.2%) completed post-graduate level and 46 respondents (13.7%) completed high school level. According to the result found the minority 3 (0.9%) had achieved PhD.

As it is indicated in the above table people who have less than 5,000 ETB of income tend to visit the hospital. This is indicated in the study finding showing that majority of the respondents 53.9% of them have some form of employment, salaried and self-employed, with the monthly income of less than 5,000 ETB. Moreover, the Table shows that 43 (12.8%) of the respondents earned an income between birr 5,001 and 10,000 per month, again 43 (12.8%) of the respondents earned an income between birr 10,000 and above 10,000 per month.

Regarding occupation, it is major source of income to support financing of medical health care. Such case also reflected by the study, this study result showed that 288 (85.7%) were engaged in any kind of occupation (Self-employed, Government staff, farmer, company staff and NGOs' staff) and 48 (14.3%) were non-working (unemployed or students).

As it is shown in Table 3 the majority of respondents had visited the hospital for the first time 134 (39.9%) or had visited the hospital from 2 to 4 times (133, 39.6%) and 69 (20.5%) of them visited the hospital for more than 4 times.

4.3.2. Descriptive Statistics for Experience of Patients towards Health Service (Independent Variable)

The Likert's Scale Analysis

In order to measure the level of patient satisfaction toward the health service; physical facilities, registration service, physician-patient interaction, Nurses-patient interaction pharmacy service as well as laboratory service were used as indicators. The level of patient's satisfaction towards health services at the Hospital was measured by Likert's scale having five grades as 1 = Strongly Disagree (very dissatisfied, 2 = Disagree (dissatisfied), 3 = Uncertain, 4 = Agree (satisfied), 5 = Strongly Agree (very satisfied).

For the study Strongly agree and agree were combined into one score to represent all the favorable (satisfied) responses while strongly disagree and disagree were combined to represent unfavorable (unsatisfied) responses. The non responses were also taken to represent uncertain responses. Thus, all the scores that reflected satisfaction and dissatisfaction were separated and expressed in percentage and presented in a tabular form.

As shown in Table 4 below, the distribution and the level of patient's satisfaction towards health services at Migbare Senay General Hospital are described.

The component related to the physical facilities of the hospital, four questions were used to ask the patients about the location of the hospital, the cleanliness of the premises, the cleanness of the rooms and the number of waiting chairs and cleanness of toilets at the hospital. As shown in the table, 71.21% of the patients were highly satisfied while 20.31% of patients were with low satisfaction or unsatisfied towards the physical environment at the hospital.

Regarding registration service, three questions were used to ask patients about the welcoming of registration staff, punctuality of registration staff and working culture of registration staff on

timely basis. Table 4 shows that 85.42% of the patients had high satisfaction but only 8.93% of them were unsatisfied. Others 5.65 were uncertain.

With regard to Physician-Patient Interaction, eight questions were used to ask patients about the physician's respect to patient to say everything they think is important, the physician's examination and treatment given to them, physician's attention paid to patients' consultation, to tell result, and whether the physicians treated them with courtesy and respect during medical examination and treatment. As shown in table 4, the majority of them which is 82.29% of the patients had high satisfaction while 11.11% of the patients had low satisfaction with the physician communication.

Nurses-Patient Interaction component comprised of four questions asking about Nurses treatment with courtesy and respect, listening patients question, communication of patients' need and nurses' punctuality in providing medical care services. As shown in the table, highly satisfied, and lowly satisfied patients were 81.18% and 9.3% respectively.

As regard of pharmacy service, three questions were asked about the pharmacy staff's respect towards patient, the way pharmacist explains how to use drugs and availability of adequate medicines. Thus Table 4 shows that 61.71% of the patients had high satisfaction and 19.64% of the patients had low satisfaction.

Concerning the laboratory service component, three questions were asked about laboratory staff's respect towards patient, the way lab technicians explains how to bring samples and provision of laboratory result in timely manner. Table 3 shows that 60.62% of the patients had high satisfaction while 26.79% of the patients had low satisfaction.

In general, the findings in this study showed that the majority of the patients had good experience with registration's services, physicians' services, nurses' services and physical facilities. However, it was noticed that there was some problem regarding cleanness of toilets and drinking water where only 37.20% of theme satisfied, the availability of medicines (only 24.11% satisfied) and time spent in providing test result where more than one-half of the respondents had poor experiences with test result provision in timely manner.

Table 4: Satisfaction of patient towards health services at MSGH

Dimensions of service quality	Dissa	tisfied	Uncertain		Sati	sfied	Mean	Std.
Dimensions of service quanty	Freq.	%	Freq.	%	Freq.	%	Wican	Deviation
Physical Facilities								
The Hospital location is easy to find	29	8.63	19	5.65	288	85.71	4.30	1.002
The Hospital premises is clean and neat	29	8.63	16	4.76	291	86.61	4.23	0.929
There are clean rooms and enough waiting chairs in the waiting area	49	14.58	34	10.12	253	75.30	3.98	1.080
There is clean toilets and drinking water	166	49.40	45	13.39	125	37.20	3.01	1.230
Average Score for Physical Facilities	68	20.31	29	8.48	239	71.21	3.88	1.060
Registration Service								
Registration staffs warmly welcomed you	33	9.82	24	7.14	279	83.04	4.12	0.983
Registration staffs were punctual and reachable	23	6.85	21	6.25	292	86.90	4.23	0.886
Registration process was done timely	34	10.12	12	3.57	290	86.31	4.20	0.944
Average Score for Registration Service	30	8.93	19	5.65	287	85.42	4.18	0.938
Physician-Patient Interaction								
During medical visits you are always allowed to say everything you think is important	16	4.76	24	7.14	296	88.10	4.39	0.839
Physicians informed you the treatment process and explains things in a way you could understand	12	3.57	23	6.85	301	89.58	4.39	0.811
Physicians are good about explaining the reason for medical test	94	27.98	16	4.76	226	67.26	3.77	1.239
Physicians explained well the test results	100	29.76	11	3.27	225	66.96	3.75	1.273
Physicians examines and listen carefully what you say	18	5.36	22	6.55	296	88.10	4.33	0.868
You had chances to discuss problems with physicians	21	6.25	38	11.31	277	82.44	4.22	0.906
Physicians spent enough time in consultation	23	6.85	31	9.23	282	83.93	4.21	0.912
Physicians treated you with courtesy and respect	15	4.46	12	3.57	309	91.96	4.44	0.780
Average Score for Physician-Patient Interaction	37	11.12	22	6.58	277	82.29	4.19	0.954
Nurses-Patient Interaction								

Dimensions of service quality		tisfied	Uncertain		Satisfied		Mean	Std.
Dimensions of service quanty	Freq.	%	Freq.	%	Freq.	%	Wican	Deviation
Nurses treat you with courtesy respect	14	4.17	30	8.93	292	86.90	4.33	0.825
Nurses listen and answer to your questions gently	11	3.27	33	9.82	292	86.90	4.31	0.798
Nurses prepared you well for the consultation and communicated patients' needs to doctors	12	3.57	40	11.90	284	84.52	4.25	0.811
Nurses were punctual and reachable and get help as soon as you want it	88	26.19	25	7.44	223	66.37	3.67	1.156
Average Score for Nurses -Patient Interaction	31	9.30	32	9.52	273	81.18	4.14	0.898
Pharmacy Service								
Pharmacy staffs showed respect toward you	5	1.49	58	17.26	273	81.25	4.23	0.799
Pharmacy staffs explained well how to use drugs	10	2.98	58	17.26	268	79.76	4.19	0.837
There were adequate amount of medicines	183	54.46	72	21.43	81	24.11	2.69	1.117
Average Score of Pharmacy Service	66	19.64	63	18.65	207	61.71	3.70	0.917
Laboratory Service								
The laboratory staff treated you with respect	73	21.73	42	12.50	221	65.77	3.78	1.163
Laboratory experts explained how to bring samples		6.25	43	12.80	272	80.95	4.11	0.882
The laboratory experts will provide you with the laboratory results in a timely manner		52.38	42	12.50	118	35.12	2.97	1.204
Average Score of Laboratory Service	90	26.79	42	12.60	204	60.62	3.62	1.083

4.3.3. Accessibility to Health Care Services

Accessibility to the Hospital comprises availability, waiting times for receiving services and financial aspects. There are 11 multiple-choice questions characterized by three-point Likert's scales. This time, the scales were also labeled as satisfied, uncertain and dissatisfied.

Perceived service quality in accessibility dimension determined by adding together all the percentage responses in this section which reflected contentment with the situation as indicated in the Table 5 below and average score calculated.

The component related to accessibility had 3 major questions asking about availability of medical aid, medical specialist and clinical staff; waiting time to get different services and affordability to get medical care. Table 5 shows that descriptive data related to the accessibility of the patients to health services at MSGH.

With regard to availability four questions was asked whether the patients have got medical aid whenever they need, availability of medical specialist in the hospital, availability of medical staff when required and ability to get medical aid in an emergency. Accordingly patients with high satisfaction, uncertain and dissatisfied were 58.56%, 18.30%, and 23.14% respectively. The majority which is 58.56% of the patients were satisfied with the availability.

Concerning the waiting time three questions were asked about the appropriateness of waiting time for registration, receiving consultation and receiving medicine. The result in table 5 shows that 67.06% of them were satisfied and 22.02% of them were dissatisfied.

As regard of medical expense, three questions were asked about affordability of medical care, whether the money they spend was reasonable and whether the patient is confident to get medical care without being set back financially.

Table 5 below shows that 58.63% of the patients had high satisfaction and 24.11% of the patients were dissatisfied.

Table 5: Accessibility to Health Care Service

	Dissa	tisfied	Unce	ertain	Sati	sfied	24	Std.
Accessibility to Health Care Services		%	Freq.	%	Freq.	%	Mean	Deviation
Availability								
You are able to get medical aid whenever you need it	21	6.25	88	26.19	227	67.56	3.92	0.938
You have easy access to a medical specialists in the hospital	137	40.77	43	12.80	156	46.43	3.15	1.218
Clinical staffs are available when required	128	38.10	55	16.37	153	45.54	3.18	1.135
It is easy for you to get medical aid in an emergency	25	7.44	60	17.86	251	74.70	4.06	0.945
Average Score for Availability		23.14	62	18.30	197	58.56	3.58	1.059
Waiting Time								
Waiting time in registration process is appropriate	47	13.99	31	9.23	258	76.79	3.98	1.064
Waiting time for receiving consultation is appropriate	37	11.01	52	15.48	247	73.51	3.96	1.008
Waiting time for receiving medicines is appropriate	138	41.07	27	8.04	171	50.89	3.28	1.259
Average Score for Waiting Time	74	22.02	37	10.91	225	67.06	3.74	1.110
Medical Expense								
Cost of medical services are affordable	135	40.18	48	14.29	153	45.54	3.15	1.179
The amount you have spend for medical needs is reasonable		22.32	66	19.64	195	58.04	3.53	1.180
You feel confident that you get the medical care you need without being set back financially		9.82	60	17.86	243	72.32	3.91	0.996
Average Score for Medical Expense	81	24.11	58	17.26	197	58.63	3.53	1.118

4.3.4. Summary of Respondents' Perception Level towards Healthcare Services

Summary of respondents' perception level towards healthcare services was calculated using the average score for the entire patient satisfaction dimensions. The average score was determined for each patient satisfaction dimension then used to get a total score. In this model, the patients' satisfaction ranges from 1 to 100 where 1 is poorest and 100 is excellent performance. The overall measure of patient's satisfaction was 69.63%.

Table 6: Summary of the Patient Satisfaction Index

Service Quality Dimensions	Patients Satisfaction Index	Mean	SD
Physical facilities	71.21	3.88	1.060
Registration service	85.42	4.18	0.938
Physician-patient interaction	82.29	4.19	0.954
Nurses-patient interaction	81.18	4.14	0.898
Pharmacy Service	61.71	3.70	0.917
Laboratory Service	60.62	3.62	1.083
Availability	58.56	3.58	1.059
Waiting Time	67.06	3.74	1.110
Medical Expense	58.63	3.53	1.118
Average Score	69.63		

The summary of the patient satisfaction index was obtained from average scores in Tables 6 and 7. Each of these tables is presentation of the variables contained in each of the dimensions. Table 6 is the presentation of the summary in tabular form.

4.3.5. Descriptive statistics for Patient Satisfaction

As part of the overall patient satisfaction three main elements of satisfaction namely convenience, courtesy, and quality of care was analyzed and discussed. Accordingly a descriptive statistics0 computation was done to obtain the frequency of the patients' responses to the questions in patient satisfaction section as displayed in number and percentage.

Just as independent variables for the independent variable strongly agree and agree were combined into one score to represent all the satisfied responses while strongly disagree and disagree were combined to represent unsatisfied responses. The non-responses were also taken to represent uncertain responses. Thus, all the scores that reflected satisfaction and dissatisfaction were separated and expressed in percentage and presented in a tabular form.

With regard to convenience, five questions were asked about ease of registration process, facilities of the hospital, and appropriateness of waiting time, presence of clinical staffs and general cleanness of the hospital. Thus regarding the convenience to health care services at th0e MSGH, most of the patients (70.71%) agreed that it was convenient for them to access to health care services at hospital. There was 18.45% of the patients' disagreed and only 10.83% of the patients' undecided about that.

In the courtesy section there were five questions, including the attitude and respect of receptionist; friendly manners of medical staff; the attentiveness of doctors/nurses while answering patients questions; confidentiality of patient's records and provision of appropriate time for medical examination. As it can be seen in table 7 the majority (77.56%) of the patients agreed that health service providers had good courtesy with them during their provision of health care services while 11.64% of the patients disagreed and only 11.13 % of the patients' undecided about the interaction of the health service providers.

Concerning quality of medical care the majority (71.23%) of the patients agreed that health service provided had good quality while 18.29% of them disagreed and only 10.48% of the patients' undecided about it. However of those components of the quality of medical care 36.9% of respondents seemed to show low rates of satisfaction when they were asked about their health improvement after the treatment and more than one-half (56.55%) of respondents also were dissatisfied with the availability of drugs in the hospital.

There were 83.93% of patients agreed with the statement that they would recommend their relatives and friends to utilize the health services provided by MSGH and only 9.23% of them disagree to recommend the hospital for others and only 6.85% of them undecided with this statement.

Regarding patient's attitude towards overall satisfaction with their visit to the Hospital73.17% of the patients agreed with the statement that there were satisfied with their visit to the Hospital while 16.13% of them dissatisfied and 10.81% of the patients undecided about it.

Table 7: Number and Percentages and Standard Deviation Score for Patient Satisfaction Item

Dependent Variable (Patient Satisfaction)		agree	Unce	rtain	Ag	ree	3.5	Std.
		%	Freq.	%	Freq.	%	Mean	Deviation
Convenience								
Ease 0of registering process	47	13.99	32	9.52	257	76.49	3.95	1.068
The Hospital is well facilitated (bed, chair, restroom etc.)	47	13.99	44	13.10	245	72.92	3.89	1.042
Appropriate waiting time	64	19.05	54	16.07	218	64.88	3.39	1.220
Regular presence of clinical staffs	76	22.62	26	7.74	234	69.64	3.72	1.126
General cleanliness in the hospital is adequate	76	22.62	26	7.74	234	69.64	3.86	1.188
Average Score or Convenience	62	18.45	36	10.83	238	70.71	3.76	1.129
Courtesy								
The attitude and respect of receptionist	60	17.86	20	5.95	256	76.19	3.85	1.054
Friendly manners of medical staff	18	5.36	17	5.06	301	89.58	4.27	0.835
The attentiveness of doctors/nurses while answering your questions	15	4.46	54	16.07	267	79.46	4.13	0.920
Confidentiality of the patient records	19	5.65	60	17.86	257	76.49	4.08	0.875
Provide appropriate time for medical examination	78	23.21	36	10.71	222	66.07	3.73	1.157
Average Score for Courtesy	38	11.64	37	11.13	261	77.56	4.01	0.968
Quality of Medical Care								
Physicians and nurses kept you from worrying	19	5.65	37	11.01	280	83.33	4.16	0.906
Medical examination, Self-confidence and ethic of the physicians	18	5.36	20	5.95	298	88.69	4.19	0.793
Quality of care by nurses is good	12	3.57	31	9.23	293	87.20	4.21	0.822
Chances in describing your health conditions] Quality of Care Patients? Opinions on Services they have Received	23	6.85	33	9.82	280	83.33	4.12	0.909
Method of consultation and treatment	17	5.06	41	12.20	278	82.74	4.15	0.900
Awareness of your health conditions	105	31.25	24	7.14	207	61.61	3.60	1.251
Health improvement after treatment	124	36.90	76	22.62	136	40.48	3.22	1.168
Presence of needed drugs		56.55	36	10.71	110	32.74	2.75	1.264
Medical care you have been receiving		13.39	19	5.65	272	80.95	3.97	1.011
Average Score for Quality of Care	61	18.29	35	10.48	239	71.23	3.82	1.003
Would you recommend this hospital to your friends and family?	31	9.23	23	6.85	282	83.93	4.30	1.062
Level of your overall satisfaction with your visit to the Hospital	92	16.13	16	10.81	228	73.17	3.71	1.270

4.3.6. Suggestion and Comments from the Respondent Regarding the Health Services of MSGH

Even though the respondents were clearly explained about the significance of the research and the use of their comments or suggestion as the indicators to improve the quality of health care at MSGH, there were only 149 (44.34%) respondents among 336 gave comments or suggestions. Most of the patient gave more than one suggestions to improve. In general comments or suggestions forwarded by patients who are willing to write their opinion is summarized in 12 key comments in Table 8, in the discussion part the highest in number of patient comments and suggestion was included.

Table 8: Patient's Suggestions and Comments

No.	Comments and Suggestion	Frequency	Percent
1	Problem related to toilet cleanness, keep soap in the toilet and additional toilet is required	25	16.78
2	Problem related to laboratory result delay, lack of libratory equipment	10	6.71
3	Problem related to medicine is not available in the pharmacy	19	12.75
4	Problem related to behaviour of nurses and other staffs	6	4.03
5	Problem related to registration waiting time	6	4.03
6	Problem related to hospital yard and parking	7	4.70
7	Problem related to delivery rooms	2	1.34
8	Problem related to medical equipment	6	4.03
9	Problem related to payment is expensive and payment method	12	8.05
10	Problems related to queuing chairs	1	0.67
11	Problem to easy access to a medical specialists and doctors	14	9.40
12	About the overall hospital service		-
	Satisfied	36	24.16
	Dissatisfied	5	3.36
	Total	149	100.00

As we can see from the above table, most of the patient commented on toilet facilities along with hand wash solution 25 (16.78%). In a study conducted in the hospital the comment forwarded showed regard to the cleanliness in the hospital, 16.78% of patients were dissatisfied and suggested that the cleanliness can surely be improved.

The next very important service to improve in this hospital was to improve is the availability of Medicine in the hospital. 19 (12.75%) of patients who forwarded comment and suggestion commented that most of the prescribed medicines are not available in the hospital, so we are forced to buy them from outside of the hospital at high cost. Therefore, they suggested that there will be necessary medicines in the future.

According to patient's suggestions and comments the next priority was to increase the number of specialists 14 (9.4%). Patients commented that there is inadequacy of number of doctors with different specialists especially Ear, Nose and Throat (ENT) treatment, this brings about waiting time too long for consultation and leads to dissatisfaction with services.

The other most important comment was the costs of some services were too high like investigation card and some advanced procedures. 12 (8.05%) patient suggests to minimize the cost to level that patient can afford.

On the other hand 10 (6.71%) of patients commented on waiting time to receive laboratory test result, which is stated as waiting time to receive laboratory result was too long it seemed to prove the level of expectation for waiting time was the poor.

Regarding the overall satisfaction of the patient about 24.16% of the patients said that the Hospital is good enough to provide quality healthcare service and they are satisfied, whereas 3.36% of them dissatisfied.

4.4. Key Informant Interview Results

This report presents a summary of findings and these findings are a critical supplement the Health service Survey and the Secondary Data Analysis components. The interview incorporates input from key informants representing the management of the Hospital, medical directors, heads and HR Managers. So that the researcher contacted three different medical ward heads and medical director as well as human resource managers.

Focusing on the questions described below the interviews were conducted by the researcher between April and May 2023. The interviewer used a standard interview "schedule" that included the following elements: 1) how would the interviewee deal with unsatisfied Patient?

How would handle a patient who is not satisfied with the services. 2) How would they handle staffs who don't value good customer service? 3) The methods the interviewee would use to know if the patients are satisfied or not and how would they collect feedback from patients? 4) How do they ensure the organization delivers the best quality of care for all patients?

All informants were made aware that participation was voluntary and that responses would be used as an inputs for the improvement of the health care provided by the hospital. Based on the summaries this report presents the results of key informant interviews for hospital. In general, it was described that the management in the hospital is leading with a focus on patient satisfaction.

The way the hospital deal with dissatisfied patients is to sit down and talk to those who claim. The claim is often related to ability to pay. When the patients were told the cost the hospital to charge they may disappointed because it is beyond their expectation. They thought that the hospital is owned by NGO and the medical expense is minimal.

However, if they face shortage of money while receiving the treatment, the management will discuss it with them. Moreover, the interviewee said that free medical services will be provided to those who cannot afford to pay and who bring testimonials from concerned body.

As we provide services based on patient satisfaction, we will not treat a practitioner who does not adhere to this principle.

If there is a professional who does not follow this or if there is evidence that he does not treat patients properly or if a complaint is made, he/she will be given a verbal warning, a written warning and suspension from work according to the strength of the complaint.

On the other hand the interviewee described that they conduct a variety of surveys about the patients' satisfaction, though not in-depth. With mini assessment they would have realized that especially young professionals have a low understanding of patient satisfaction, so they have been working on this.

We conduct a variety of surveys about our patients' satisfaction, though not in-depth. In our research, we have realized that especially young professionals have a low understanding of patient satisfaction, so we need to work on this.

On the other hand they mentioned that suggestion box is there. From this box, comments and suggestion forwarded by patients was collected at most every month and analyze the complaints and opinions of the patients and try to improve the health service quality.

Also, when patients are discharged from treatment, we ask them how their treatment process was and their opinion.

Sometimes they visit other similar institutions and exchange experiences to improve the service provision.

The hospital's service delivery will be reported to various relevant parties such as the health bureau, board members and the church. Problems encountered will be discussed and solutions will be given. They are monitored to follow rules and guidelines.

Although there is nothing that makes this hospital different from other similar institutions, our service delivery is based on patient satisfaction. However, the income got from this health service will be used to support children who grow up in Children and Family Affairs Organization.

4.5. Test Results for the classical linear regression model Assumptions

Different tests were run to make the data ready for analysis and to get reliable output from the research. In this study as mentioned in chapter three different tests were carried out to ensure that the data fits the basic assumptions of classical line regression model. i.e., the CLS assumptions, are fulfilled when the explanatory variables are regressed against the dependent variables. Consequently, the results for model misspecification tests are presented as follows.

4.5.1. Correlation Analysis

Brooks, (2008) claims that the degree of linear relationship between two variables is measured by their correlation. The Pearson product moment of correlation coefficient was

utilized to determine the relationship between the independent factors and the dependent variable. The correlation coefficient between any two variables always ranges from +1 to -1. A correlation of +1 means that there is a perfect, positive, linear relationship between the two variables. An whereas an exact negative association is indicated by a correlation coefficient of -1. On the other side, a correlation value of zero shows that there is no linear link between the two variables. The correlation analysis results for the explanatory factors (Physical Facility, Registration Service, Physician-Patient interaction, Nurses-Patient interaction, Pharmacy Service, Laboratory Service, Availability and Waiting Time) and the dependent variable (Satisfaction Level (SatiLevel2) are shown in the following tables.

As we can see from the below table, since there is no correlation above 0.8 in this study according to Cooper and Scheduler (2003) and Lewis Beck (1993), it can be concluded in this study that there is no problem of multicollinearity, thus enhanced the reliability for regression analysis.

Table 9: Correlation Matrix of Dependent variable and Explanatory Variable

	Correlations											
		Sati.	Phy. Fac	Reg.n	Physic	Nurse	Pharma	Lab Ser.	Availability	Waiting		
		Level 2		Ser	Com.	Com.	Ser.			Time		
SatiLevel2	Pearson Correlation	1										
PhyFac	Pearson Correlation	.558**	1									
RegSer	Pearson Correlation	.574**	.343**	1								
PhysicCom	Pearson Correlation	.761**	.395**	.452**	1							
NurseCom	Pearson Correlation	.682**	.404**	.463**	.641**	1						
PharmaSer	Pearson Correlation	.520**	.355**	.236**	.472**	.433**	1					
LabSer	Pearson Correlation	.607**	.399**	.242**	.529**	.497**	.550**	1				
Availablity	Pearson Correlation	.583**	.425**	.412**	.427**	.435**	.380**	.466**	1			
WaitingT	Pearson Correlation	.627**	.322**	.514**	.444**	.393**	.359**	.392**	.463**	1		
**. Correlation	on is significant at	the 0.01	level (2-tai	led).								

4.5.2. Test for Heteroscedasticity

Heteroscedasticity is a systematic pattern in the errors where the variances of the errors are not constant (Gujarati, 2004). Heteroscedasticity makes estimators not efficient because the estimated variances and covariance of the coefficients are biased and inconsistent and thus, the tests of hypotheses are no longer valid. In this study as shown in Figure below we can assume that the residuals have a constant variance over a range of measured values so that we can ensure that the residuals are drawn from a population with constant variance. It would satisfy one of the assumptions of the OLS regression and ensure that the model is more accurate. Therefore there is no evidence for the presence of Heteroscedasticity.

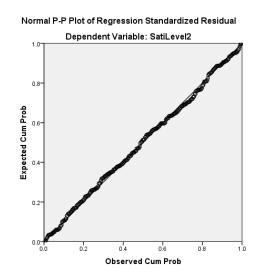


Figure 4: Test for Heteroscedasticity

4.5.3. Test of normality

One of the assumptions of linear regression analysis is that the residual is normally distributed, at the mean of zero and standard deviation of one. One way of testing normality is using k density to produce a kernel density plot with the normal option requesting that a normal density be overlaid on the plot. K density stands for kernel density estimate. It can be thought of as a histogram with narrow bins and moving average.

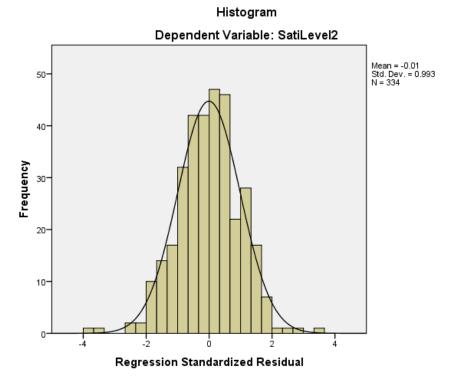


Figure 5: Histogram

Source: SPSS output

4.5.4. Test for Multicollinearity

Based on table 10 multi-collinearity indicates a linear relationship between explanatory variables which may cause the regression model biased (Gujarati, 2004). So as to examine the possible degree of multicollinearity among the explanatory variables, Variance Inflation Factor (VIF) technique was employed to detect the multicollinearity problem and strengthen the analysis. Besides to correlation analysis multicollinearity problem is also identified by Variance Inflation Factor (VIF). Theoretically, a VIF greater than 10 may suggest that the concerned variable is multicollinear and a variable is less than the level of significance (0.05), then it indicates the variable is multicollinear with others in the model. Hence, the VIF's result in Table below shows none of the VIFs is excessively high, suggests that there is no perfect or strong collinearity between the explanatory variables. We conclude that collinearity is not suspected.

Table 10: Variance Inflation Factor

]	Model	Colline Statis	•
		Tolerance	VIF
	PhysicCom	.492	2.032

Wa	aitingT	.617	1.622
Ph	yFac	.722	1.384
Nu	rseCom	.507	1.971
Av	ailablity	.622	1.608
La	bSer	.586	1.705
Re	gSer	.610	1.640

a. Dependent Variable: SatiLevel2

4.6. Linear Regression Analysis: Results and Discussions

Regression methods such as linear, logistic, and ordinal regression are useful tools to analyze the relationship between multiple explanatory variables, and dependent variable. These methods also permit researchers to estimate the magnitude of the effect of the explanatory variables on the outcome variable. If researchers wish to study the effect of explanatory variables on all levels outcome, regression method must be appropriately chosen to obtain the valid results (Eygu, H. and Gulluce, A. (2017).

The linear regression method is capable of allowing researcher to identify explanatory variables related to dimensions of health care that contribute to overall patient satisfaction. The linear regression also permit researcher to estimate the magnitude of the effect of the explanatory variables on the overall patient satisfaction. The overall patient satisfaction questionnaire was analyzed by the linear regression method to achieve the following study objectives:

- 1. To identify significant explanatory variables that influenced the overall patient satisfaction.
- 2. To estimate thresholds (i.e. constants) and regression coefficients.
- 3. To describe the direction of the relationship between the explanatory variables and the overall patient satisfaction based on the sign (+ and -) of regression coefficients.

Thus, in this study the linear regression method was used to determine the predictive effect of the five dimensions of service quality (independent variables) from the factor analysis on patient satisfaction (dependent variable) using a p<0.05 as a statistical criterion.

4.6.1. Effects of Health Care Service Dimensions and Control Variables on Patient Satisfaction (Factors Affecting Patients' Satisfaction at MSGH)

The following table presents the results of multiple regressions analysis. Here the squared multiple correlation coefficients (R2) which tells us is the proportion of variables in the dependent variable (patient satisfaction) explained by the regression model.

Table 11: Regression Model Summary (Overall Satisfaction as Dependent Variable)

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.895	.800	.791	.30376

After running the test that produces the model for predicting "General Patient Satisfaction", by putting all independent and controlling factors together, the results of multiple regressions, as presented in table 8, above, revealed that the health care service dimensions (Age of the respondent, Occupation of the respondent, Educational level of the respondent, Income of the respondent by Birr, Marital status of the respondent, Gender of the respondent, Physical Facilities, Registration Service, Doctors Patient interaction, Nurse Patient Interaction, Pharmacy Service, Laboratory Service, Availability, Waiting Time, Medical Expense) combined significantly influence the satisfaction of patients. The adjusted R square of 0.791 indicates that 79.10% change in patient satisfaction was due to these independent variables and the remaining change in percentage was due to others variables.

Table 12: Multiple Regression Analysis Test Result for All Variables (Overall Satisfaction as Dependent Variable)

Model		Unstanda Coeffic		Standardized Coefficients	t	Sig.	
		В	Std. Error	Beta			
	(Constant)	283	.162		-1.744	.082	
	Gender of the respondent	017	.035	013	498	.619	
	Age of the respondent	.000	.017	.001	.029	.977	
	Marital status	.046	.026	.054	1.805	.072	
	Educational level	012	.011	037	-1.090	.277	
1	Occupation	019	.013	045	-1.534	.126	
	Income in Birr	.031	.019	.057	1.660	.098	
	Physical Facilities	.157	.026	.182	5.975	.000	
	Registration Service	.105	.027	.127	3.838	.000	
	Doctors Patient interaction	.281	.035	.305	7.930	.000	

Model	Unstanda Coeffic		Standardized Coefficients	t	Sig.
	В	Std. Error	Beta		_
Nurse Patient Interaction	.119	.034	.127	3.523	.000
Pharmacy Service	.031	.032	.032	.986	.325
Laboratory Service	.091	.029	.113	3.183	.002
Availability	.097	.028	.120	3.461	.001
Waiting Time	.158	.027	.205	5.788	.000
Medical Expense	.008	.028	.010	.283	.777

The standardize beta coefficient tells us the unique contribution of each factor to the regression model. A high beta value and a small p value (<.001) indicate the predictor variable has made a significance statistical contribution to the model. On the other hand, a small beta value and a high p value (p >.001) indicate the predictor variable has little or no significant contribution to the model. (Ggorge et al., (2003).

Checking the standardized coefficient variable and the significance value of the variables, the results in Table 10 revealed that the dependent variable "Overall evaluation of hospital care" was significantly and positively correlated with the following health care service dimensions: "Physical Facilities" (p<0.001), "Registration Service" (p<0.001), "Doctors Patient interaction" (p<0.001), "Nurse Patient Interaction" (p<0.001), "Availability" (p=0.001) and "Waiting Time" (p<0.001).

The Model

The significant service quality factors have been included for the establishment of the function. In this model some of the variables having significance values >0.001 are excluded from the test.

The established multiple linear regression function is:

$$Y = 0.283 + 0.182X_1 - 0.127X_2 + 0.305X_3 + 0.127X_4 + 0.120X_5 + 0.205X_6$$

As we can see from Table 12 and multiple regression analysis test model, Physical Facilities (0.182), Registration Service (0.127), Doctors Patient interaction (0.305), Nurse Patient Interaction (0.127), Availability (0.127) and Waiting Time (0.205) variables have positive beta value which contribute in a positive way to the dependent variable.

This study also demonstrated that a rises or a falls of Physical Facilities, Registration Service, Doctors Patient Interaction, Nurse Patient Interaction, Availability and Waiting Time by a unit results in a satisfaction increases or decreases in a proportion of 0.182, 0.127, 0.305, 0.127, 0.120 and 0.205, respectively.

The coefficient value signifies how much the mean of the dependent variable changes given a one-unit shift in the independent variable while holding other variables in the model constant. This property of holding the other variables constant is crucial because it allows you to assess the effect of each variable in isolation from the others.

The height coefficient in the regression equation is 0.305. This coefficient represents a unit increase in Doctor-Patient interaction additional brings about an increase of 0.305 units in patient satisfaction. The next higher coefficient is 0.205 which signifies a one unit increase of mean of the patient stisfaction changes given a 0.205 shift in the Waiting Time.

4.6.2. Effects of Patient Satisfaction on the Intention to Recommend

To test whether "patient satisfaction" is a predictor of "patients' intention to recommend to others" simple linear regression analysis was used.

$$Y = a + b_1 X_1$$

Where Y: represent the dependent variable (Intention to recommend)

 X_1 : is the general patient satisfaction (independent variable)

a: is the constant

Table 13: Regression Model Summary (Intension to Recommend as Dependent Variable)

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Sig. F Change
1	.651	.424	.422	.807	.000

The table also shows the F value, which represents the overall significance of the regression model.

In the above table the adjusted R square value is .422, is the coefficient of determination, is the squared value of the multiple correlation coefficient that proves the "overall satisfaction"

can explain 42.2% of intention to recommend; rest of 57.8% is explained by other factors not mentioned in our regression model.

$$Y = a + b_1GS$$

Table 14: The regression analysis result (Intension to recommend as dependent variable)

	Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	
		В	Std. Error	Beta			
	(Constant)	.313	.259		1.211	.227	
1	Overall satisfaction	1.033	.066	.651	15.624	.000	

The above tables shows that the coefficient of regression line. It states that the **Intention to recommend (Y) is** equal:

$$Y = 0.313 + 0.651*General satisfaction$$

Table 11 indicates that there is a significant and positive re-relationship between intention to recommend and general patient satisfaction with level of satisfaction (p<.001).

On the basis of Beta coefficients the model shows that an increase 1 percent in "general patient satisfaction" causes .651 percent positive increase in "intention to recommend" and t - value is also significant since it is less than 0.001.

4.6.3. Regressing Patients' Satisfaction on the Service Quality Dimensions

Multiple regression analysis test result in Table 9 indicates that except Laboratory Service and Pharmacy Service, all dimensions of service quality have significant effect on customer satisfaction. Moreover, from the findings of this study, it was found out that all of the 6 control variables have no significant influence on patients' satisfaction at 95% confidence level and are not the predictors of "Overall Patient Satisfaction".

On the other hand from service quality dimension, Pharmacy Service and Laboratory Service have no significant effect on patient satisfaction.

Accordingly hypothesis testing was done based on standardized coefficients beta with 95% confidence level to test whether the hypotheses which are mentioned in chapter one are accepted or rejected.

Hypothesis 1

H₁: Physical facilities has a positive effect on patient satisfaction

The results of multiple regressions, as presented in Table 9 above and multiple regression model established thereafter, revealed that physical facilities have a positive and significant effect on patients' satisfaction with a standardize coefficient beta value, (.182), at 95% confidence level.

Therefore, hypothesis 1 is accepted since Physical facilities have a positive and significant effect on patients' satisfaction.

Hypothesis 2

H₂: Doctor-patient interaction has a positive effect on patient satisfaction

The results of multiple regressions, as presented in table 12 above, revealed that Doctors-patient interaction have a positive and significant effect on patient satisfaction with a standardize coefficient beta value (.305), at 95% confidence level.

Therefore, the researcher accepts hypothesis 2 since Doctors-patient interaction has a positive and significant effect on patient satisfaction.

Hypothesis 3

H₃: Nurse-patient interaction has a positive effect on patient satisfaction

The results of multiple regressions, as presented in Table 12 above, revealed that Nurse-patient interaction have a positive and significant effect on patients satisfaction with a standardize coefficient beta value, (.127), at 95% confidence level.

Therefore, research hypothesis 3 has been confirmed and accepted since; nurse-patient interaction has a positive and significant effect on customer satisfaction.

Hypothesis 4

H₄: Availability to health care has a positive effect on patient satisfaction

The results of multiple regressions, as presented in Table 9 above, revealed that accessibility to health care have a positive and significant effect on patients satisfaction with a standardize coefficient beta value, (.120), at 95% confidence level.

Therefore, hypothesis 4 is accepted as health care has a positive and significant effect on patients' satisfaction.

Hypothesis 5

H₅: Patients with lower education are more likely to show a higher level of satisfaction

The results of multiple regressions, as presented in Table 9 above and the regression analysis model thereafter, revealed that educational Level has a negative and insignificant effect on patient satisfaction with a standardize coefficient beta value, (-.037), at 95% confidence level. This indicates that if a patient has lower educational level he/she is more likely to show a higher level of satisfaction compared to those who are with higher level of education.

Therefore, the research hypothesis 5 is accepted since the study confirmed that educational Level has a negative effect on patient satisfaction.

Hypothesis 6

H₆: Patients with older age are more likely to show a higher level of satisfaction

The results of multiple regressions presented in Table 9 above, revealed that Age of respondents has a positive and significant effect on patient satisfaction with a standardize coefficient beta value (.001), at 95% confidence level. This means that if a patient have lower age he/she is more likely to show a lower level of satisfaction compared to those who are with higher age.

Therefore, the hypothesis 6 is accepted since, age of respondents has a positive and significant effect on patient satisfaction.

Hypothesis 7: There is no relationship between customer satisfaction and positive word of mouth (recommendation of hospitals to others).

As it can be seen in Table 11, the results of regression analysis showed that there is significant and positive re-relationship between intention to recommend and general patient satisfaction with a standardize coefficient beta value .651, at 95% confidence level.

Therefore, the researcher reject the null hypothesis since intention to recommend has a positive and significant effect on patient satisfaction.

4.6. Discussion

As it can be seen in Table 12 the final result of this study showed that the majority of patients (69.13%) were satisfied with the services that they had received at the hospital. Similar study conducted by Azanu K. et al., (2014), in selected hospitals Northwest Ethiopia, the overall satisfaction was found to be 67.1%. Another similar study conducted by Pitaloka (2006) showed that more than half of the patients were satisfied with the service that they had received (56.7%), while not satisfied (43.3%). Also another study conducted by Amin Khan Mandokhail in 2007, Thailand, the level of satisfaction among 225 Medicine OPD patients was 86.67%.

a. Implications of Patient Demographics on Patient Satisfaction

Patient demographic can be a good predictor of patient satisfaction with medical services. For example it is believed that older people are less ready to criticize and have more modest expectations. One possible reason could be that older patients, who have more ailments and visit the doctor more frequently, would concentrate more on care itself rather than external factors (Kalda et al., 2003). With respect to this study,

Possible patient factors affecting his/her satisfaction with healthcare are principally demographic characteristics (Sitzia, 1983) such as age, gender, race, place or region of residence, education level, employment status, health status among others.

Ware et al (1983) found out that age is an important determinant of satisfaction with healthcare received. In this study, even if age is not significant, the coefficient of regression

analysis model shows that it is positive showing satisfaction with healthcare was found to rise with increasing age. This was largely consistent with the findings in most other studies (Carr-Hill, 1992; Sitzia et al, 1997; Cohen, 1996; Williams, 1991 and Rahqvist, 2001) on satisfaction with healthcare who found that older patients generally report higher levels of satisfaction than younger patients. However, this relationship be confounded by patient's health status or health-related quality of life (Cohen, 1996).

Regarding gender, this study demonstrated that gender has no a statistically significant effect on healthcare satisfaction levels. This result is supported by a study done by Sitzia and Wood (1997) which led to the conclusion that gender has no effect on satisfaction levels. However, Rahmqvist (2001) in one aspect found absence of correlation between gender and patient satisfaction index (PSI).

On the effect of education level on satisfaction with quality of healthcare, this study found that it has no a statistically significant effect on healthcare satisfaction levels but the coefficient shows that patient satisfaction was influenced negatively by the increasing educational attainment i.e. higher satisfaction is associated with lower educational level and vice versa. Sitzia and Woods (1997) claim that the evidence on the relationship between educational attainment and satisfaction is ambiguous and could be confounded by other factors such as income.

With respect to average family income, patients in the group that earned between 2,000 and 5000 birr per month were more satisfied than those in the other groups. However, no statistical association could be established. This result is opposite to the study conducted by Partha P.R. (2002) who found that clients with lower income reported higher level of satisfaction with the medical care service. It was also contradictory with the study of Shahid P.A. (1998) about client satisfaction towards health center services in urban Islamabad. He found that the lower income group was significantly more satisfied than the higher income group.

Regarding marital status, it was found that married patient group (57.7%) had more satisfaction level than single patient group (29.8%). The result of this study was similar with the result of Partha P.R.'s (2002) research, in which he reported that even though the results

were statistically not significant, married clients had higher level of satisfaction with medical care service than single clients.

b. Experience of Patients towards Health Service

With regard to the level of satisfaction in nine components, namely, physical environment registration service, Physician-patient interaction, Nurses-patient interaction, pharmacy service, laboratory service and availability, waiting time, and medical expense as indicated in Table 6, this study revealed that patients were satisfied with the first four top components, namely Physical facilities 71.21%, Registration service 85.42%, Physician-patient interaction 82.29%, Nurses-patient interaction 81.18% with more than 70%. While Pharmacy Service, Laboratory Service, waiting time, availability and medical expense with 61.71%, 60.62%, 67.06%, 58.56% and 58.63% respectively. These findings could reflect that patients were more concerned about Pharmacy Service, Laboratory Service, waiting time, availability and medical expense components than the others.

Physical Facility

The study on physical facility focused on the ease to find the location of the hospital, cleanness and neatness of the Hospital's premises, cleanness of rooms & enough waiting chairs in the waiting area, cleanliness of the toilets & drinking water and existence of modern equipment in the hospital at the Hospital. The results of this study showed the majority of the respondents (71.21%) were satisfied with the physical facilities at the Migbare Senay General Hospital, 8.84% were uncertain, 20.31% were dissatisfied with the healthcare.

According to study conducted by Leather et al, (2003), there is strong evidence that comfortable environment, aesthetically pleasing, and informative relieve stress among patients and increases satisfaction with the quality of care provided. The authors (Leather et al, (2003) asserts that renovating a traditional waiting area by making small changes to the general layout, colour scheme, furniture, floor covering, curtains, and providing informational material and information displays resulted in more positive environmental appraisals, improved mood, altered physiological state, and greater reported satisfaction among waiting patients.

The overall respondents' satisfaction with the physical environment at the cancer outpatient clinic at KNH was 61.8%. This supports findings by Sofaer et al, (2005) in a study whereby she conducted focus group discussions which cited cleanliness of hospital rooms and bathrooms as the most important item in the quality of care. Further, the study by Ulrich et al (2008) confirmed that physical environment such as supportive work place, cleanliness, better ventilation and other better ergonomic designs helps reduce errors, reduce stress, reduce pain and improve other outcomes. The authors noted that improved physical settings can be an important tool for making hospitals safer and more healing and better place to work.

Interpersonal Relations

The interpersonal relations factors relate to care givers and patients interaction, it is usually represented by the parameters such listening, courtesy, caring and respect. The overall findings in this study showed that satisfaction with Physician-patient interaction was 82.29% with 11.12% dissatisfaction. This study also showed that satisfaction with Nurses-patient interaction was 81.18% with 9.3% dissatisfaction. On the other hand, the regression analysis results in Table 9 indicates that "Doctors Patient interaction" (p<0.001) and "Nurse Patient Interaction" (p<0.001), was significantly and positively correlated with patient's overall evaluation of hospital care.

These findings are supported by study conducted by Amin Khan Mandokhail in 2007, Thailand, the level of satisfaction among 225 Medicine OPD patients was 86.67%. Physicians and nurses were perceived as friendly and helpful by 82.67% and 82.22%, respectively.

Consistent with that of other studies (Oflaz & Vural, 2010; Otani et al., 2011), 'interaction with nurses' (p<0.001) and "interaction with doctors" (p<0.001), was significantly and positively correlated with patient's overall evaluation of hospital care. Oflaz & Vural (2010) suggested that when patients feel confident about the care they receive from nurses, they are more likely to be content with their hospitalization. The multivariate analysis of all the independent variables against both dependent variables, communication with nurses and communication with doctors remained the main predictors of patient satisfaction.

Being treated with respect, having things explained and in turn being listened to by nurses and physicians are important predictors of patient satisfaction. Sick people are very much in want of interpersonal care to make them feel better morally and emotionally as much as they want to be physically better.

Accessibility to Care

The accessibility to care in this research was limited to availability of medical aid and qualified physicians, waiting times for receiving services and financial aspects. The results showed the respondents were overall satisfied with accessibility at 61.42% while 23.09% said they were not satisfied. The findings contracts the research by Pitaloka and Rizal (2006) to identify the level and factors associated with patients' satisfaction in Hospital Universiti Kebangsaan Malaysia in which 61.3% of the respondents were not satisfied with the accessibility aspect of care.

General Satisfaction

Regarding the level of satisfaction in terms of convenience, courtesy and quality of care shows moderate levels of satisfaction. When compared with all the components of satisfaction, courtesy gained highest percentage of high satisfaction (77.56%). Quality of care gained the second highest 71.23% satisfied while convenience accounts the lowest percentage 70.71%. Patient satisfaction is certainly a useful measure, and to the extent that it is based on patients' accurate assessments, it may provide a direct indicator of quality care. According Aldana et al, the most powerful predictor for client satisfaction with the health care services was the provider's behavior towards the patient, particularly respect and politeness.

CHAPTER FIVE

CONCLUSIONS AND RECOMMENDATIONS

5.1. Introduction

Patient's satisfaction with quality healthcare is pivotal to healthcare delivery in Hospital. The management together with service providers are key-runners to achieving quality healthcare by providing patient-centered care to patients. This study was undertaken to first, to assess the level of patients' satisfaction with the health care services provided by Migbare Senay General Hospital (MSGH). Second, to assess key service quality dimensions that are good predictors to patients satisfaction with quality healthcare delivery in the hospitals. Thirdly, to identify areas for improvement and make changes that benefits the service users (patients).

In this chapter, conclusions, and recommendations are presented.

5.2. Conclusion

The results of this study pointed out important results on patient satisfaction measurement helpful for the Migbare Senay Hospital healthcare system.

This paper "Patient Satisfaction towards Hospital Services: A Case Study of Migbare Senay General Hospital") was aimed to answer to the research question: "How satisfied are patients from entering till discharge?" and "What are the factors related to patient satisfaction with health care services?" In detail, it attempts to identify the elements of the hospitalization experience that more affect patient satisfaction. It was generally observed that Physical Facility, Registration Service, Doctors-Patient interaction, Nurse-Patient Interaction, availability and waiting time dimensions of service quality influences patient satisfaction of overall care. Particularly, Table 10 shows that doctors-patient interaction, physical facilities and waiting time are the main predictor of patient satisfaction.

The conclusion is not that to focus only on those patients which provide the high ratings according to the satisfaction but also focus on those customers which have negative perception about the quality of health care service. It is necessary for the effective production

to spend some recourse on these customers to identify the actual problem. This study confirmed that all the elements related to patient's profile, such as socio demographical characteristics and hospitalization experience are helpful to identify specific clusters for each health service and to design cluster oriented strategies.

As it can be seen from the result of the study even though the customers were moderately satisfied with the overall service and performance it should need to check that which variables were rated low and need to more focus on those variables.

Other main factors are the physical facility elements such as rooms and toilet facilities should be clean and clear because it reduces the patient stress.

Accessibility elements such as availability of qualified and enough doctors in number and specialty, waiting time to receive laboratory results and medical expensesespecially registration fee are also important factors that affect patient satisfaction and customer loyalty so management should hire the qualified medical staffs.

As a conclusion since health care is the high involvement services as concern to the person's health and well being so healthcare providers should manage the quality and continuously redesigning the process and understanding the factors which are highly influence patient satisfaction.

To improve these variables or for the better performance it is necessary to evaluate or identify the patients' needs on the annual basic as well.

In general it can be said that with the strengthening information system, identifying the causes of dissatisfaction and attempt to resolve the shortcomings and proper planning will provide better service with high quality.

5.3. Recommendations

Regarding the level of satisfaction the results of this study indicates that the overall satisfaction level of patient's at MSGH is average (69.63%) which indicates that still there are rooms for quality improvements.

Based on the findings of the above data analysis, the following recommendations have been made for the attention of medical departments and the intervention of management.

5.3.1. Recommendations for Service Improvement

It is known that the hospital has to improve the actual performance to meet the patients' expectation and the good reputation to improve the attitude towards the hospital. Accordingly the following recommendation is forwarded to improve patient satisfaction in the hospital;

- 1. According to this study the majority of the patients had good experience with registration's services, physicians' services, nurses' services and physical facilities. However, cleanness of toilets and drinking water (where only 37.20% of theme satisfied), the availability of medicines (only 24.11% satisfied) and time spent in providing test result (where more than one-half of the respondents had poor experiences with test result provision in timely manner) has been the major concern of the patients who participated in this study. Most of the patients comment given priority for these issues that needs to be improved as soon as possible to meet patient satisfaction.
- 2. It is highly suggested that needed and adequate amount of drugs should be available in the Pharmacy.
- 3. There should be employment of more doctors with different specialty to make it easy for patients to have different alternatives and be attended timely.
- 4. The result of this study also showed us that patients are less satisfied with their medical expense (45.54% satisfied and 40.18% not satisfied), especially the registration fee. It should be minimized to level that communities with low level of income can afford.
- 5. Management needs to update the front staff periodically and orient the new development in the hospital.

5.3.2. Recommendations for Future Research

1. Further study about patient satisfaction survey should be conducted systematically in each unit of services with higher number of respondents which includes both service providers and service users in order to get real picture of service system.

2. Periodical study focusing on patients' satisfaction in the hospital should be implemented to keep up with the change of the phenomena.

The relationship between patient experience and employees' satisfaction should be investigated.

REFERENCE

- Afzal, M. et al. (2014), Effect of demographic characteristics on the patient's satisfaction with health care facility. *Journal of Postgraduate Medical Institute*, 28(2),154-160.
- Al-Abri, R. & Al-Balushi, A. (2014), Patient satisfaction survey as a tool towards quality improvement. *Oman Medical Journal*, 29(1), .3-7.
- Anna Maria Murante, (2010). Patient satisfaction: a strategic tool for health services management, Scuola Superiore Sant'Anna,
- Anastasios and others(2013). Assessment of patient satisfaction in public hospitals in Cyprus: a descriptive study, *Health Science Journal*. V. 7, pp.28-34.
- Aydin, S. (2018). Factors Affecting Patient Satisfaction With Healthcare System of Turkey. (Doctoral dissertation). Retrieved from https://scholarcommons.sc.edu/etd/4946
- Bara, A. C., Van den Heuvel, W.J.A., Maarse, J.A.M., & Van Dijk J. P. (2012). User satisfaction with the Romanian health care system: an evaluation of recent health care reforms. *European Journal of Public Health*, 12(4), 39-44.
- Best M. & Neuhauser, D. (2011). Heroes and martyrs of quality and safety: *Quality safety health care*. 19(5), 466-468.
- B. Prakash (2010). Patient satisfaction and normative decision theory. *Journal of Cutaneous and Aesthetic Surgery*, 3(3), p. 151.
- Bhandari, P. (2020). Population vs. Sample | Definitions, Differences & Examples: https://www.scribbr.com/methodology/population-vs-sample/.
- Casey A, Wallis A (2011), Effective communication: Principle of Nursing Practice E. Nursing Standard, (25)32, 25-37.
- Catherine Efuteba, (2013). Factors Influencing Customer Satisfaction in Health care services: The Case of Public and Private Hospitals in North Cyprus, Eastern Mediterranean University, Gazimağusa, North Cyprus.

- Creswell, J. W. (2014). Research Design: Qualitative, Quantitative and Mixed Methods Approaches (4thed.). Thousand Oaks, CA: Sage.
- Elmar M. Kleinjan, (2013). Perceived patient satisfaction with the treatment of back problems:

 Exploring the differences between general hospitals and private clinics, University of Twente.
- Eyasu KH, Adane AA, Amdie FZ, Getahun TB, Biwota MA (2016). Adult Patients' Satisfaction with Inpatient Nursing Care and Associated Factors in an Ethiopian Referral Hospital, Northeast, Ethiopia.
- Eygu, H. and Gulluce, A. (2017) Determination of Customer Satisfaction in Conservative Concept Hotels by Ordinal Logistic Regression Analysis. *Journal of Financial Risk Management*, **6**, 269-284. doi: 10.4236/jfrm.2017.63020.
- Farzianpour, F., Byravan, R. and Amirian, S. (2015). Evaluation of Patient Satisfaction and Factors Affecting It: *A Review of the Literature. Health*, **7**, 1460-1465. http://dx.doi.org/10.4236/health.2015.711160.
- Feysia B, Herbst CH, Lemma W, Soucat A (2015). *The Health Workforce in Ethiopia: Addressing the Remaining Challenges*. 2226 June. The World Bank 1-116.
- Geoffrey Marczyk, David DeMatteo, and David Festinger (2010). *Essentials of Research Design and Methodology*, John Wiley & Sons, Inc., Hoboken, New Jersey, Canada.
- George, D., & Mallery, P. (2019). *IBM SPSS statistics 26 step by step: A simple guide and reference*. 16th ed. New York: Routledge
- GfK Polonia, (2013). Analysis of sample size in consumer surveys, Poland.
- Goyal P, Kumar D, Dixit S, Srivastav S, Singh A (2016). Essential criteria for quality OPD services as perceived by patients in a tertiary care hospital in Faridabad City. International Journal of Research in Medical Sciences. Int J Res Med Sci 4(2), 441-445.
- Hamed Taherdoost (2016). Sampling Methods in Research Methodology; How to Choose a Sampling Technique for Research. *International Journal of Academic Research in Management* (IJARM), 2016, 5.ffhal-02546796f.

- Halil Zaim and others, (2010). Service Quality and Determinants of Customer Satisfaction in Hospitals: Turkish Experience, *International Business & Economics Research Journal*, pp. 21-58.
- Haskins JLM, Phakathi S, Grant M, Horwood CM (2014) Attitudes of nurses towards patient care at a rural district hospital in the Kwazulunatal Province of South Africa. *Afr J Nurs Midwifery* 16: 32-44.
- Health care quality (2018).In Wikipedia, the free encyclopedia.https://en.wikipedia.org/wiki/Health_care_quality
- Hospital Activity Report (2022). Migbare Senay General Hospital, Addis Ababa.
- Hospital Strategic Plan (2014). Migbare Senay General Hospital 2015-2019 Strategic Plan, Addis Ababa.
- HRM Manual (2016). Migbare Senay General Hospital HRM Manual, Addis Ababa.
- Iftikhar, A., Allah N., Shadiullah, K., Habibullah, K., Muhammad, A., R., Muhammad, H., K. (2011), predictors of patient satisfaction, *Gomal Journal of Medical Sciences*, 9, (2) 183-188.
- Jilisa M. C (2014) Understanding Patient Satisfaction and Nursing Care. *International Journal for Human Caring*, 18 (4) 61-64.
- Khamis K, Njau B (2014). Patients level of satisfaction on quality of health care at Mwananyamala hospital in Dar es Salaam, Tanzania. *BMC Health Serv* Res 14: 400.
- Kutney-Lee, A. et al., (2010). Nursing: A Key to Patient Satisfaction. Health Aff (Millwood), 28(4), 1–10.
- Legesse MT, Salgedo WB, Walle AA (2016), Adult Patient Satisfaction with Inpatient Nursing Care in a Referral and Teaching Hospital in Southern Nations Nationalities and Peoples' Region (SNNPR), Ethiopia. J Nurs Care 5(2), 1-5.
- Linda, D., U. (2012), *Patient satisfaction measurement: current issues and implications*. Lippincott's Case Management, 7(5), 194-200.

- Maconko M, Kopanski Z, Strychar J, Malek L (2016). Patient satisfaction and the methods of its assessment. *J Clin Healthc* 3: 14-19.
- Manzoor F, Wei L, Hussain A, Asif M, Ali Shah SI (2019). Patient Satisfaction With Health Care Services; An Application of Physician's Behavior as a Moderator. *Int. J Environ Res Public Health* 16: 3318.
- Mao Vadhana (2012). Assessment of Patient Satisfaction in an Outpatient Department of an Autonomous Hospital in Phnom Penh, Cambodia, Ritsumeikan Asia Pacific University, Cambodia.
- Merkouris A, Andreadou A, Athini E, Hatzimbalasi M, Rovithis M, Papastavrou E., (2013). Assessment of patient satisfaction in public hospitals in Cyprus: a descriptive study, *Health Science Journal*.7(1):28-40.
- Mohan R.& Sai Kumar K.(2011), A study on the satisfaction of patients with reference to hospital services, *ZENITH International Journal of Business Economics & Management Research*, 1(3),2249-8826.
- Musbah FA (2015). Nurse with cancer patient satisfaction. Universiti Tun Hussein Onn Malaysia.
- Mugenda, O. M., & Mugenda, A. G. (2013). Research Methods: Quantitative and Qualitative Approaches. Acts Press, Nairobi, 2003.
- Naseer, M., Zahidie, A., Shaikh, B. T. (2012), Determinants of patient's satisfaction with health care system in Pakistan: a critical review. *Pakistan Journal of Public Health*, 2(2), 52-61.
- Onyeonoro UU, Chukwu JN, Nwafor CC, Meka AO, Omotowo BI, et al. (2015). Evaluation of Patient Satisfaction with Tuberculosis Services in Southern Nigeria. Heal Serv Insights 8: 25-33.
- Osiya DA, Ogaji DS, Onotai L (2017). Patients' satisfaction with healthcare: comparing general practice services in a tertiary and primary healthcare settings. *The Nigerian Health Journal*, Niger Heal J 17.
- Özdemir, H. (2015). A Study for Determining the Characteristics of Conservative Hotel Customers in Hotels. PhD Dissertation, Ankara: Gazi University Institute of Education Sciences.

- Quarterly Health Bulletin, (2014). *Policy and Practice Information for Action*, Federal Democratic Republic of Ethiopia Ministry of Health, Addis Ababa.
- Park K.(2011). *Park's text book of preventive and social medicine*. 21sted. Jabalpur: Banarsidas Bhanot Publishers; p.838.
- Payne, K., & Grey, L. (2014). Quantitative Methodologies. In An Introduction to Health Services Research Sage Publications Ltd.
- P. R. Sodani & K. Sharma (2014). A study on patient satisfaction at a multi super specialty hospital in Delhi, *Hospital Topics*, 92(1), pp. 1–6.
- Rodrigues A. V. D., Vituri D. W., Haddad M. D L., VannuchiM. T. O. &OliveiraW. T. (2012), Nursing care responsiveness from the client's view, Rev Esc Enferm USP; 46(6), 1446-1452.
- Schoenfelder T., Klewer J.& Kugler J. 2011, Determinants of patient satisfaction: a study among 39 hospitals in an in-patient setting in Germany. *International journal for quality in Health Care*, 23(5),503-509. Advance Access Publication.
- Sharma A, Kasar PK & Sharma R. (2014). Patient Satisfaction About Hospital Services: A Study From the Outpatient Department of Tertiary Care Hospital, Jabalpur, Madhya Pradesh, India. Natl *National Journal of Community Medicine*; 5(2):199-203.
- Sharew NT, Bizuneh HT, Assefa HK, Habtewold TD (2018). *Investigating admitted patients'* satisfaction with nursing care at Debre Berhan Referral Hospital in Ethiopia: A cross-sectional study. BMJ Open 8: DOI: 10.1136/bmjopen-2017-021107.
- Shinde M. & Kapurkar K. (2014). Patient's satisfaction with nursing care provided in selected areas of tertiary care Hospital. *International Journal of Sciences and Research* (IJSR), (3), 2319-7064.
- Shinde M. & Kapurkar K. (2014), Patient's satisfaction with nursing care provided in selected areas of tertiary care Hospital. *International Journal of Sciences and Research*(IJSR),(3), 2319-7064.
- Singh, Ajay S., & Masuku, Micah B. (2014). Sampling Techniques & Determination of Sample Size In Applied Statistics Research: An Overview, *International Journal of Economics, Commerce and Management*, 2(11), United Kingdom.

- Soter Ameh, Francesc Xavier Gómez-Olivé, Kathleen Kahn, Stephen M. Tollman and Kerstin Klipstein-Grobusch (2017). Relationships between structure, process and outcome to assess quality of integrated chronic disease management in a rural South African setting: applying a structural equation model. *BMC Health Services Research*, 17:229: DOI 10.1186/s12913-017-2177-4.
- Tisa C. Grant, (2012). Patient satisfaction with inpatient services at the national referral hospital of Belize, Taipei Medical University.
- Tarus, T.K. et al. (2014), Assessment of Patient Satisfaction with Nursing Care at a Large Public *Referral Hospital in Kenya*, 4(26), 156–161.
- Vadhana (2012), Assessment of Patient Satisfaction in an Out Patient Department of an Autonomous Hospital in Phnom Penh, Cambodia, A thesis submitted in partial fulfillment of the requirement of the Ritsumeikan Asia Pacific University in Partial Fulfillment of the Requirements for the Degree of Master.
- Wai Mun, et al. (2013). "Patient Satisfaction with Nursing Care: A Descriptive Study Using Interaction Model of Client Health Behavior (Malaysia). 2013, 3(2): pp.51-56.
- Ziapoor A., Khatony A, Jafari F., & Kianipour N. (2016). Patient satisfaction with medical services provided by a hospital in kerman. shah- Iran, *Acta Medica Mediterranea*, (32) 959-965
- Zhao, S.H. & Akkadechanunt, T., 2011, Patients "perceptions of quality nursing care in a Chinese hospital, *International Journal of Nursing and Midwifery*, 3(9),145–149.

Appendix I: Survey Questionnaires (English Version)

Dear respondent,

My name is Yeabsira Solomon. I am conducting a research. This questionnaire is developed to collect data on the topic entitled "Patient Satisfaction Regarding Hospital Services: A Case Study of Migbare Senay General Hospital". It is carried out only for academic purposes, to write a Thesis, in partial fulfillment of the requirements for the award of the degree of Master of Business Administration. Moreover, it might also serve as input for policy makers and implementers to change the situation. Filling the survey questionnaire is voluntary. Your genuine response will provide valuable information on the topic.

I am declaring the	I am declaring that all information will be kept confidential and used only for academic purpose only.								
Are you willing	Are you willing to give this interview?								
Yes □	No 🗆								
			Thank you for you	ır valuable time					
Part I - Soci	io-Demographic C	In-Patients							
1. Gender:	Male \square Female \square		Out-Patient						
2. How old ar	e you?								
<18 🗆	18-30 □31-40 □41-50 □	51-60 □ > 60 □							
3. What is you	ur marital status?	Single \square Married \square	Divorce □Widow	ed/Separated □					
4. What is you	ur educational level?								
Illiterat	e Primary Second	ary □High school □ Po	ost-graduate 🗆 Dip	loma □					
BA/BS	C □ MA/MSC □	PHD □							
5. What do yo	ou do for living?								
Student	\Box Unemployed \Box	Self-employed \square	Government staff						
Farmer	\square Worker \square	Company staff \square	NGOs' staff □						
6. How much	do you earn per mont	ch?							
No income [\Box = 2,000 birr \Box 2001-50	00 birr □5001-10,000 bir	r \square more than 10,000) birr □					

7. I	How many times have you visite	d the h	ospital?	•				
	First time \Box 2-4 times \Box	more t	han 4 tir	nes 🗆				
8. V	Who paid the treatment fee?							
	Personal finance ☐ Govern	ment [NGC) [
	Tersonal finance - Govern	incii L	NOC	<i>,</i>				
Par	t II- Experiences of patien	ts wit	th the	Healt	h Ca	re Serv	vice	
	se write () in the box that is appropents' opinions on services they have		•	lote tha	t the qu	uestions i	n this section	are about
Phys	sical Facilities							
No.	Patients' Opinions on Services they have Received	Stron	А	gree	Uncer	rtain I	Disagreed	Strongly Disagree
9.	The Hospital location is easy to find							
10.	The Hospital premises is clean and neat							
1.1	There are clean rooms and							
11.	enough waiting chairs in the waiting area							
10	There is clean toilets and							
12.	drinking water							
Regi	stration Services						·	
No.	Patients' Opinions on Services	Str	ongly	Agree	Unc	ertain	Disagreed	Strongly
110.	they have Received	A	gree	Agitt	Onc	ci taiii .	Disagreed	Disagree
13.	Registration staffs warmly welcomed you							
14.	Registration staffs were punctual and reachable							
15.	Registration process was done timely							
Phys	sician-Patient Interaction				1			
No.	Patients' Opinions on Service they have Received		trongly Agree	Agre	e Un	certain	Disagreed	Strongly Disagree
	During medical visits you are		<i>8</i> **					
16.	always allowed to say everything							
	you think is important							
17.	Physicians informed you the							

No.	Patients' Opinions on Services	Strongly	Agree	Uncertain	Disagreed	Strongly
	they have Received	Agree				Disagree
	things in a way you could					
	understand					
	Physicians are good about					
18.	explaining the reason for medical					
	test					
19.	Physicians explained well the test					
17.	results					
20.	Physicians examines and listen					
20.	carefully what you say					
21.	You had chances to discuss					
21.	problems with physicians					
22.	Physicians spent enough time in					
22.	consultation					
23.	Physicians treated you with courtesy					
	and respect					

Nurses-Patient Interaction

No.	Patients' Opinions on Services they have Received	Strongly Agree	Agree	Uncertain	Disagreed	Strongly Disagree
24.	Nurses treat you with courtesy					
	respect					
25.	Nurses listen and answer to your					
23.	questions gently					
	Nurses prepared you well for the					
26.	consultation and communicated					
	patients' needs to doctors					
	Nurses were punctual and					
27.	reachable and get help as soon as					
	you want it					

Pharmacy Services

No.	Patients' Opinions on Services they have Received	Strongly Agree	Agree	Uncertain	Disagreed	Strongly Disagree
28.	Pharmacy staffs showed respect					
20.	toward you					
29.	Pharmacy staffs explained well					
	how to use drugs					
30.	There were adequate amount of					
	medicines					

Laboratory Service

No.	Patients' Opinions on Services they have Received	Strongly Agree	Agree	Uncertain	Disagreed	Strongly Disagree
31.	The laboratory staff treated you with					
31.	respect					
32.	Laboratory experts explained how to bring					
32.	samples					
	The laboratory experts will provide you					
33.	with the laboratory results in a timely					
	manner					

Part III. Accessibility to Health Care Services

Availability

No.	Patients' Opinions on Services they have Received	Strongly Agree	Agree	Uncertain	Disagreed	Strongly Disagree
34.	You are able to get medical aid					
31.	whenever you need it					
35.	You have easy access to a medical					
33.	specialists in the hospital					
36.	Clinical staffs are available when					
30.	required					
37.	It is easy for you to get medical aid in					
37.	an emergency					

Waiting Time

No.	Patients' Opinions on Services	Strongly	Agree	Uncertain	Disagreed	Strongly
110.	they have Received	Agree	Agree	Oncertain	Disagreeu	Disagree
38.	Waiting time in registration process					
30.	is appropriate					
39.	Waiting time for receiving					
	consultation is appropriate					
40.	Waiting time for receiving medicines					
	is appropriate					

Financial Aspects

No.	Patients' Opinions on Services	Strongly Agree	Agree	Uncertain	Disagreed	Strongly Disagree
	they have Received	Agree				Disagree
41.	Cost of medical services are					
	affordable					
42.	The amount you have spend for					
12.	medical needs is reasonable					
43.	You feel confident that you get the					

medical care you need without being			
set back financially			

Part IV - General Patient Satisfaction

Convenience

No.	Patients' Opinions on Services they have Received	Strongly Satisfied	Satisfied	Uncertain	Dissatisfied	Strongly Dissatisfied
44.	Ease of registering process					
45.	The Hospital is well facilitated (bed, chair, restroom etc.)					
46.	Appropriate waiting time					
47.	Regular presence of clinical staffs					
48.	General cleanliness in the hospital is adequate					

Courtesy

No.	Patients' Opinions on Services they have Received	Strongly Satisfied	Satisfied	Uncertain	Dissatisfied	Strongly Dissatisfied
49.	The attitude and respect of					
	receptionist					
50.	Friendly manners of medical					
20.	staff					
	The attentiveness of					
51.	doctors/nurses while answering					
	your questions					
52.	Confidentiality of the patient					
32.	records					
53.	Provide appropriate time for					
	medical examination					

Quality of Care

No.	Patients' Opinions on Services they have Received	Strongly Satisfied	Satisfied	Uncertain	Dissatisfied	Strongly Dissatisfied
54.	Physicians and nurses kept you from worrying					
55.	Medical examination, Self- confidence and ethic of the physicians					
56.	Quality of care by nurses is good					
57.	Chances in describing your					

Patients' Opinions on Services	Strongly	Satisfied	Uncertain	Dissatisfied	Strongly
	Satisfied				Dissatisfied
Method of consultation and					
treatment					
Awareness of your health					
conditions					
Health improvement after					
treatment					
Presence of needed drugs					
Medical care you have been					
receiving					
Level of your overall satisfaction					
with your visit to the Hospital					
	_		·	s 🗆	
rt V. Suggestions or Comm	ents for t	the Impr	ovement o	of the hospi	tal's
i	health conditions Method of consultation and treatment Awareness of your health conditions Health improvement after treatment Presence of needed drugs Medical care you have been receiving Level of your overall satisfaction with your visit to the Hospital Would you recommend this hospital The probably no Tuncertain the probably no Tunce	they have Received health conditions Method of consultation and treatment Awareness of your health conditions Health improvement after treatment Presence of needed drugs Medical care you have been receiving Level of your overall satisfaction with your visit to the Hospital Would you recommend this hospital to your itely no Probably no Uncertain Probab	they have Received health conditions Method of consultation and treatment Awareness of your health conditions Health improvement after treatment Presence of needed drugs Medical care you have been receiving Level of your overall satisfaction with your visit to the Hospital Would you recommend this hospital to your friends and itely no Probably no Uncertain Probably yes	they have Received Satisfied Satisfied Health conditions Method of consultation and treatment Awareness of your health conditions Health improvement after treatment Presence of needed drugs Medical care you have been receiving Level of your overall satisfaction with your visit to the Hospital Would you recommend this hospital to your friends and family? itely no Probably no Uncertain Probably yes Definitely yes	they have Received Satisfied Uncertain Dissatisfied health conditions Method of consultation and treatment Awareness of your health conditions Health improvement after treatment Presence of needed drugs Medical care you have been receiving Level of your overall satisfaction with your visit to the Hospital

Thank you very much for your valuable time!

Appendix II: ለህጣማ የቀረበ ጣተዶቅ (Amharic Version)

ስጫየአብስራ ሰለሞን ደባላል፡፡ በቢዝነ ስ አስተዳደር ለማስተርስ የመጀዊያ ጽሁፌን እያዘጋጀሁ እን ኛለሁ፡፡ ደህ ማስይቅ የተዘጋጀው በምባረሰናይ አጠቃላይ ሆስፒታል ህመማ በቂና የተሟ አንልማሎት ማንኘት አለማንኘታቸውን የሚያስረዳ ሚጀ፤ ለማሰብሰብ ሲሆን ዓላሜውምሆስፒታሉ በሚሰውዋ በፍ አንልማሎት የሕመማ እርካታምን እንደሚቀል ለማስናት ነ ው፡፡ ለአላጭውማካት የእርሳን ትብዠር እሻለሁ፡፡ በዚህ ጥናት ለመሳተፍ እኔ የእርስዎን ጥሎ ፈቃደኝነ ት ያለምንምአስንዳጅነ ት እየጠየ ቅሁ በትክክል የሚሰማዎትን በመጭት ለጥናቱ ውጭ ጥራት የበኩሉዎትን አስተዋጽኦ እንዲያበረክቱ በአክብሮት እጠይቃለሁ፡፡

ይህን ቃለ	ቀ የተሞ	ለጣስጡ ል	ፈቃደኛ	ነ ዎት?
--------	-------	--------	------	-------

አዎ □ አይ □	በ <i>ሎ</i> ምአ <i>ጣ</i> ရማናለሁ
ክ ና ል አንድ – የ <i>ግ</i> ል ሁኔ <i>ታ</i> በተ ጣ ስተ	ተኝቶ ታካሚ 🗌
1. ጾታ ወንድ 🗌 ሴት 🗌 2. ዕድሜ ከ18 በታች 🗆 ከ18-30 🗆 ከ31-40 🗆 ከ41-50 🗆	
3. የጋብቻ ሁኔታ፡ ያላገባ/ች 🗆 ያገባ/ች 🗆 የፈታ/ች 🗆	
4. የትምህርት ደረጃ፡ ያልተሚረ/ች □ 1ኛ ደረጃ □ ሁለተኛ ደረጃ (8-10) ዲፕሎማ □ የΦጀመሪያ ዲግሪ □ ማስተርስ ዲግሪ □ ዶክ	
5.	
6. ውርሃዊ ክፍያ በብር፦ ምንም 7ቢ የሌለው □ ከ 2,000 በታች □ ከ 2000 ከ5001-10,000 □ ከ10,000 በላይ □	L-5000 🗆
7. በዚህ ሆስፒታል ምን ያህል ጊዜ ታክጣዋል? ለጣጀሚያ ጊዜ 🗌 h2-4 ጊዜ	□ ከ4 ጊዜ በላይ □
8. ለዚህ ህክምና ከፋዩ ማ ው የ በማል 🗌 በማማስት 🗌 የማማስታዊ ያል!	ፓ ድርጀት □
ክፍል ሁለት፡ – የ <i>ሕ</i> ሞን የ <i>በ</i> ፍ አ <i>ን ልግ</i> ለት ሁኔታ :	
ትክክለኛ አ ሜ ጭፊት ለፊት የራይት (✔) ምልክት ያድር <i>ጉ</i>	

ሀ) ተቋማዊ አንልግለት አሰጣን ምክት

	በተቀበሉት አንልማለት የህጣኝ አስተያየት	በ ም ሕስ ማዝ ሁ	እስ ማ አ ሁ	እር <i>ግ</i> ጡ አይደለሀም	አልስ ማም	በ ሳም አልስ ማም
9	የሆስፒታሉን ቦታ ለማነኝት ቀላል ነው (ሆስፒታሉ ለህ ጣማ በሟጣች ቦታ <i>ይነ</i> ኛል)					
10	የሆስፒታሉ ግቢ በሳም ንጹህና ግሩም ነው					
11	ሆስፒታሉ ንጹህ ክፍለ ቫ ና ለህክምና ተራ ም ስበበቂያ ቦታ ምቹ ወንበሮች አሉት					
12	ሆስፒታሉ ንጹሀ ሜዳጃ ቤትና ንጹሀ የማስጥ ውሃ አሉት					

ለ) የሆስፒታሉ የሕሞች አቀባበል/የካርድ ጭነት

	በተቀበለት <i>አን ልግ</i> ለት የህ መን አስተያየት	በላም	\$ SOMMALL	እር ግ በኛ	r yyamman	በሳም
	በተቀበሉት አ <i>ን ልግ</i> ሉት የህ ጣማ አስተያየት	እስ ማ የለሁ	እስ ማፕለሁ	አደደለሀም	አልበ ማም	አልስ ማም

13	የ <i>እንግ</i> ዳ ተቀባዮች (የካርድ ክፍል ሥራተኞች) <i>ሕ</i> ጦማ ን በፈ <i>ንግታ</i> ይቀበላሉ			
14	የእንግዳ ተቀባዮች (የካርድ ክፍል ሠራተኞች) በሰዓታቸው ይገ <i>ኛሉ</i> ፣ በቀላሉ ይገኛሉ			
15	የካርድ ጭጣት ሥራው በጊዜው ይፈጸጫ			

ሐ) ሐኪም ዶክተር – ሕ**ጦማ** *ግንኙ*ነት

	በተቀበሉት <i>አንልግ</i> ሉት የህ ጣኝ አስተያየት	በ ም እስ ማአ ሁ	እስማ የለሁ	እር <i>ግ</i> ጡ <u>ኛ</u> አይደለሀም	አልስ ማም	በ ጥም አልስ ማም
16	በሕክምና ወቅት የሚሰማዎትን ህማምና ስሜቴ እንዲናንሩ ይበረታታሉ					
17	ሐኪምዎ የህክምፕውዓ ሁኔታና ሂደት በቀላሉ በሚባዎት ሜስኩ 7ልጸሉዎታል					
18	ሐኪም የሕክምና ምሮሞራዎን የሚያደርንብትን ምክንያት በማነለጵ በኩል ጥሩ ነበሩ (ላብራቶሪ ምሮሞራ)					
19	ሐኪምዎ የምሮሞራ ውብቼዎን በሚባ ንልጾሉዎታል					
20	ሐኪምዎ ምሮሞራውዓ በተንቢው አከናውኖዎለቃል፤ የ <i>ሚ</i> ናንሩትንም ከልብ ያዳምየዎታል					
21	ከሐኪምዎ <i>ጋ</i> ር ችግርዎን በ ማ ነሳት በግልጽ የ ሚ ያየት ዕድል ተፈጥሮሎዎታል					
22	ሐኪምም ከእርዎ ጋር በቂ የምፎሜና የማማስር ጊዜ አሳልፈዋል					
23	ሐኪምን በጫነካም ስነምንባርና አክብሮት አክምንታል					

ማ የነርሶች – *ሕ***ሞማ** ማንኘነት

	በተቀበለት <i>አንልግ</i> ለት የህ ጣ ን አስተያየት	በ ም እስ ማ አሁ	እስ ማማለሁ	እር <i>ግ</i> በኛ አደደለሀም	አልስ ማም	በ ም አልስ ማም
24	ነ ርሶች በጫካም ስነ ምባባርና አክብሮት ይንከባከብዎታል					
25	ነርሶች የሚገሩትን በተገቢው ያዳምነሉ፤ ለሚነይቁት ሳያቄ በአ <i>ግ</i> ባቡ ምላሽ ይሰጣሉ					
26	ነ ርሶች እርዎ በሐኪዎዎ ለሚደርንት ህክም በተንቢው አዘ <i>ጋ</i> ጅቶዎታል					
27	ነርሶች ሰዓት አክባሪና በቀላሉ የ ሚ ኙ ናቸው እንዲሁም አስፈላጊ ለሆነ እርዳታ ፈጥኖ ደራሽ ናቸው					

ሠ) የፋር**ጣ**ሲ አ*ገልግ*ለት

	በተቀበሉት አንልማሉት የህጣኝ አስተያየት	በ ጥ እስ ማዝ ሁ	እስ ማ የለሁ	እር <i>ግ</i> በኛ አይደለሀም	አልስ ማም	በ ም አልስ ማም
28	የፋር ማ ሲ ባለ ም ዎች በአክብሮት አስተና <i>ግ</i> ድዎታል					
29	የፋርጣሲ ባለማዮዎች ስለ ምድሀኒት አውነሰድ በደንብ 7ልጾልዎታል					
30	በፋርማሲው አስፈላጊና በቂ ማድህኒት ይንኛል					

ረ) የላቦራቶሪ አ*ገልግ*ለት

	በተቀበሉት <i>አገልግ</i> ሎት የህ ጣ ን አስተያየት	በ ም እስ ምአ ሁ	እስ ማ ንለሁ	እር <i>ግ</i> በኛ አይደለሀም	አልስ ማም	በ ም አልስ ማም
31	የ ላቦራቶሪ ባለማቃዎች በአክብሮት አስተናግድዎታል					
32	የላብራቶሪ ባለ ም ዎች እንዴት ና ሞ እንደሟሞኩበተንቢው አስረድቶዎታል					
33	የላብራቶሪ ባለሟዎች የላብራቶሪ ውጭነ በተንቢው ሰዓት አቅርቦሉዎታል					

ክፍል ሶስት: - የ*ጤ* አ*ገልግ*ለት ተደረሽነት

ሀ) አቅርቦት

	በተቀበሉት <i>አ1 ልግ</i> ለት የህ ጣ ን አስተያየት	በ ም እስ ማ አሁ	እስ ማየ አ ሁ	እር <i>ግ</i> በኛ አደደለሀም	አልስ ማም	በ ሳም አልስ ማም
34	በፈለኩኝ ጊዜ የህክምና እርዳታ ማስኘት እቸላለሁ					
35	በሆስፒታሉ የህክምና ስፔሺያሊስቶችን በቀላሉ ለማስኘት ችያለሁ					
36	የሕክምና ባለምምዎች በሚስፈልንበት ጊዜ በቀላሉ ማነኘት ይቻላል					
37	በድንንተኛ ጊዜ የሕክምና እርዳታ በቀላሉ ማነኘት እችላለሁ					

ለ) የቆይታ/የኅበቃ ጊዜ (ውረፋ)

	በተቀበሉት <i>አገልግ</i> ለት የሀ ጣማ አስተያየት	በ ጥ ም እስ ማሜ ሁ	እስ ማየለሁ	ሕርግጡ አይደለሀም	አልስ ማም	በ ም አልስ ማም
38	ካርድ ለማውሳት የማወስደው ጊዜ (ወረፋ) ተንቢ ነው					
39	የሕክምና አገልግሎት ለማግኘት የምክበቀው ጊዜ ተገቢ ነው					
40	ማድህኒት ለ ማ ቀበል ወይም ለማንዛት የምክብቀው ጊዜ ተንቢ ነው					

ሐ) የክፍያ *ጉ*ዳይ

	በተቀበሉት <i>አንልግ</i> ሉት የህ ጣ ን አስተያየት	በ ም እስ ማ አሁ	እስማ የለሁ	እር <i>ግ</i> ጡ አይደለሀም	አልስ ማም	በ ሳም አልስ ማም
41	ለሕክምና አገልግሎት የጣኒፈለው ክፍያ አቅምን ያገናዘበ ነው					
42	ለሕክምና አ <i>ገ</i> ልግሎት የከፈልኩት ክፍያ ምክንያታዊ (ትክክለኛ) ነው					
43	የ ሟ ስፈል7ኝን የ <i>ሕ</i> ክምና አ <i>ገልግለ</i> ት ለማነኘት በ <i>1</i> ንዘብ እرረት					
	እንደ ሚ ስተዓ <i>ጎ</i> ል እር <i>ግ</i> ሰኝነት ይሰ ማ ል					

ክፍል አራት ፡ – አጠቃላይ የ*ሕ*ሞማ እርካታ

U) *ም*ቱን ት:

	በተቀበለት አንልማለት የህ ሜ ን አስተያየት	በ ተም እስ ማዝ ሁ	ሕስማዝ ሁ	እር <i>ግ</i> ሰኛ አይደለሀም	አልስ ማም	አልስ ማም በላም
44	በቀላሉ ካርድ ለጫወሓት ቾያለሁ					
45	ሆስፒታሉ ለአንልግሎት የተማቻቸ ጫኙ (አልዖ, ሚፈያ ውንበሮች, ሚፈያ ቦታዎች ወነተ.)					
46	ለተለያዩ አንልግለ ባ ቸ የኅገቃ ጊዜ (ውረፋ) ተንቢ ነው					
47	የህክምና ባለ ም ዎች በሚበኛ ሰአ <i>ታ</i> ቸው <i>ይነ</i> ኛሉ					
48	አሰቃላይ በሆስፒታሉ ንጹህ ሞሆን እረክቻለሁ					

ለ) ሜካም ባህሪ:

	በተቀበሉት <i>አገልግ</i> ሉት የሀ ጣ ን አስተያየት	በ ም እስ ማ አሁ	<i>እስማ</i> ¶ለሁ	እር <i>ግ</i> ሰኛ አደደለሀም	አልስ ማም	ሰላም አልስ ማም
49	የሕ ሞማ ተቀባዮች (ካርድ ክፍል ሠራተኞች) አማእካከትና አክባሪነ ት					
	σ φ C					
50	የህክምና ባለምዎች ሳሩ አቀራረብ ሞናር					
51	በዶክተሮቸና ነርሶች በኬል ከሕ ሞማ የ ሚ የቁትን ሳያቄዎች በሳ ጥ					
	በሜ መጥ መንጓስ					
52	የህ ጣማ ማሲሰር በዚህ ሆስፒታል ይጠንቃል					
53	ዶክተሮች ሀ ጮጓ ን ለመጀመር በቂ ሰአት ይሰ小ሉ					

ሐ) የ*አገልግ*ለት አሰላጥና እንክብከቤ ጥራት

		በተቀበለት <i>አገልግ</i> ለት የህ ጣ ን አስተያየት	በ ም እስ ማ የአሁ	እስ ማ ንለሁ	እር <i>ግ</i> ሰኛ አይደለሀም	አልስ ማም	በ ሳም አልስ ማም
Ī	54	ሐኪሞችና ነርሶች ከሟጩቁኝ ነ <i>ገሮ</i> ች ታድገውኛል					
Ī	55	በሐኪሞች ስነ ምንባር፣ ምሮሚና በሪስ ጣተማማ ጣኖሩ					
Ī	56	በነርሶች በተሰሰው የእንክብክቤ ድጋፍ ኅራት ሞኖሩ					

	በተቀበለት አንልማለት የህጣኝ አስተያየት	በ ታም እስ ማዝ ሁ	እስ ማየ ለሁ	እር <i>ግ</i> በኛ አደደለሀም	አልስ ማም	አልስ ማም አልስማ
57	የራስን የሰፍ ሁኔታ በነጻነት የመንለጽ ዕድል መኖሩ					
58	የምክርና ህክምና አሰጣጥ ዘዴ					
59	የጤነት ሁኔታዬን በጫወቅ ደረጃ በተሰጡኝ አገልግሎት					
60	ከህክምና በኋላ የ <i>ቡ</i> ፍ <i>ሞ</i> ሻሻል ማ ኖር					
61	አስፈላጊ የሆኑ					
62	በተቀበልኩት የህክምና አሰ小ጥና እንክብከቤ በኩል					
63	ከሆስፒታሉ ባንኙት አንልግሎት አሰቃላይ የእርካታ ደረጃ					

64. ስለ ሆስ	ፒታት ለዓደኞ	ዎትና ቤተሰብና	ያ ይጣስክራሉ?	ወደ ሆስፒታለ	· እንዲሞኩይማ	ነ ራሉ?		
በፍጹ	ም አላደር <i>ገ</i> ወ	ም □	<i>ም</i> ፕልባት አላ	ደርገውም [🗌 አርግጡኛ	አደደለሁም		
<i>ም</i> ንአ	ልባት አደር <i>ገ</i> ነ	ዋለሁ 🗌	በደንብ አደ	ር <i>ገ</i> ዋለሁ				
ክ ና ል አፃ	ት ት –	ከሆስፒታሉ	የሚኝት	አ <i>ገ ልግለች</i>	እንዲ ሻሻል	የሕርስዎ	ተዓፂተሰለ	

ወድ ጊዜዎን ስለሰብኝ በ**ጣም** እ**ጣት**ማናለሁ!!

Appendix III: Interview question for the Hospital's medical department heads and managers at different level

1. Describe briefly about your experience with the health care provision?

The interviewer wants to know where the interviewee has worked before, for how long he/she have worked, and the experience he/she have gained.

2. What kind of strategies and mindset is required for this role?

The interviewer asks this question to learn what attitude the interviewee have towards this role. Talk about what hospital managers should always focus on.

3. How would you deal with unsatisfied Patient?

The interviewer wants to know the level of problem-solving skills. Explain how would handle a patient who is not satisfied with the services.

4. How would you handle a staff who doesn't value good customer service?

The interviewer wants to know how the interviewee would handle an employee who is not good at customer service.

- 5. The methods you would use to know if the patients are satisfied or not.
- 6. How would you collect feedback from patients?
- 7. How do you ensure your organization delivers the best quality of care for all its patients?
- 8. How do you demonstrate the value of your services to stakeholders?
- 9. What qualities distinguish you from other healthcare administrators?