

**Patient Satisfaction and Associated Factors at Adult Outpatient
Department of District Hospitals, South Wollo Zone, Amhara Region,
North East Ethiopia**

**By:
Haile Seid**

**A Thesis Submitted to Jimma University, Collage of Public Health and
Medical Sciences, Department of Health Service Management, In Partial
Fulfillment of the Requirements for the Degree of Masters in Hospital
Administration (MHA)**

**OCTOBER 2013
JIMMA**

**Patient Satisfaction and Associated Factors at Adult Outpatient
Department of District Hospitals, South Wollo Zone, Amhara Region,
North East Ethiopia**

By:

Haile Seid (BSc. in Public Health)

Email: haileseid.2012@yahoo.com

Phone No. : +251923440926

Advisors:

1. Waju Beyene (BSc., MPH, Assistant Professor)

Email: dagimwaju@yahoo.com

Phone No.: +2519111808400

2. Berehane Megersa (BSc, MSc)

Email : ayanekebeto2001@yahoo.com

Phone No.: +251917804469

OCTOBER 2013

JIMMA

Abstract

BACKGROUND: Satisfaction is considered as one of the desired outcomes of health and it is directly related to utilization of health care services. Various studies have showed that satisfied patients are more likely to utilize health service, comply with medical treatment, and continue with health care providers. The aim of this study is to get the real figure of patient satisfaction at the outpatient departments in two district Hospitals.

OBJECTIVE: To assess patient satisfaction and factors associated with outpatient health services in Boru meda & Hidar 11 hospitals in South Wollo Zone.

MEETHODS: A cross sectional facility based study was conducted from 7 June to 8 July 2013 on a sample of 290 patients by using non random sampling technique (convenience technique). The data was collected using pretested and structured questionnaire through interview and it was analyzed using Statistical Package for the Social Sciences version 16.00 windows software program. Both bivariate and multivariate logistic regression analyses were carried out. Significant factors were reported at $p < 0.05$ with 95% confidence interval.

RESULT: Two hundred and ninety patients were involved in the study with 100% response rate. The overall patient satisfaction level was 48.3%. Satisfaction was found highest (84.8%) with out of pocket payment and lowest with courtesy (37.2%). The predictors of patient satisfaction with outpatient services were patients 'expectation towards waiting time, patients' expectation towards the information about their illness, and the overall attitude patients have towards the health service.. Patients who have medium expectation towards waiting time have 7.76 times more likely satisfied than those patients who have poor expectation (95% CI of (0.306-.0.935)). The odds of satisfaction score of patients having fair attitude towards the health service delivery system was found 4.1 times more likely satisfied as compared to those patients having poor attitude (95% CI of [.014-012]). Those patients with medium expectation towards the information they would receive about their illness were found 4.78 times more likely satisfied when compared to those having low expectation ((95% CI of [.039-092]).

CONCLUSION: The overall satisfaction is low. Patients with poor attitude have got low level of satisfaction. The higher the expectation of patients towards the information they get about their illness, the higher will be their level of satisfaction. Patients with fair level of expectation towards waiting time were found to be more satisfied as compared to that low level of expectation. The physical environment is one of the major areas that have effect on the level of satisfaction.

Acknowledgement

I would like to express my heartfelt gratitude to my advisors Mr. Waju Beyene and Ms. Berehane Megersa for their unreserved support and guidance in the preparation of this thesis. I also would like to extend my appreciation to those who have helped me a lot by giving additional support and advice.

Abbreviations

AOR	Adjusted Odds Ratio
CI	Confidence Interval
COR	Crude Odds Ratio
G.C	Gregorian calendar
IGMH	Indira Gandhi Memorial Hospital
JUCPHMS	Jimma University College of Public Health and Medical Sciences
MDGs	Millennium Development Goals
MHA	Master of Hospital Administration
NSNS	Newcastle Satisfaction with Nursing Scale
OCHA	Office for the Coordination of Humanitarian Affairs
OPD	Out Patient Department
SPSS	Statistical Package for the Social Sciences
US	United States
WHO	World Health Organization

Table of Contents

ABSTRACT	I
ACKNOWLEDGEMENT	II
ABBREVIATIONS.....	III
TABLE OF CONTENTS	IV
LIST OF FIGURES.....	VI
LIST OF TABLES	VII
CHAPTER ONE INTRODUCTION	1
1.1. BACKGROUND.....	1
1.2. PROBLEM STATEMENT	2
CHAPTER TWO LITERATURE REVIEW	4
2.1. PATIENT SATISFACTION AS A MEASURE OF QUALITY OF CARE.....	4
2.2. PATIENT SATISFACTION INDIFFERENT COUNTRIES	5
2.3. FACTOR ASSOCIATED WITH PATIENT SATISFACTION	7
2.4 CONCEPTUAL FRAME WORK	8
CHAPTER THREE SIGNIFICANCE OF STUDY.....	9
CHAPTER FOUR OBJECTIVES	10
4.1 GENERAL OBJECTIVE	10
4.2 SPECIFIC OBJECTIVES	10
CHAPTER FIVE METHODS	11
5.1 STUDY AREA AND PERIOD	11
5.2 STUDY DESIGN	11
5.3 POPULATION	11
5.4 SAMPLING SIZE DETERMINATION AND SAMPLING TECHNIQUES	11
5.5 STUDY VARIABLES	13
5.6 INCLUSION AND EXCLUSION CRITERIA	13
5.7 DATA COLLECTION TOOLS AND PROCEDURE.....	13
5.8 OPERATIONAL DEFINITIONS.....	14

5.9 DATA ANALYSIS PROCEDURES	17
5.10 DATA QUALITY MANAGEMENT	18
5.11 ETHICAL CONSIDERATION	18
5.12 DISSEMINATION PLAN.....	18
CHAPTER SIX RESULTS	19
6.1 SOCIO-DEMOGRAPHIC CHARACTERISTICS OF THE PATIENTS	19
6.2 EXPECTATION TOWARDS THE HEALTH SERVICE	21
6.3 ATTITUDE TOWARDS THE HEALTH SERVICE	22
6.4 SATISFACTION TOWARDS HEALTH SERVICE.....	25
6.5 FACTORS ASSOCIATED WITH SATISFACTION TOWARDS THE HEALTH SERVICE.....	28
6.6 PATIENTS' COMMENTS AND SUGGESTION GIVEN TO IMPROVE THE QUALITY OF HEALTH CARE SERVICES AT TWO DISTRICT HOSPITALS, SOUTH WOLLO ZONE, AMHARA REGION, NORTH EAST ETHIOPIA, JULY 2013	32
CHAPTER SEVEN DISCUSSION	37
STRENGTH AND LIMITATIONS OF THE STUDY	43
CHAPTER EIGHT CONCLUSION AND RECOMMENDATIONS	44
8.1. CONCLUSION.....	44
8.2. RECOMMENDATIONS.....	45
REFERENCES.....	46
ANNEXES	49
ANNEX 1 ENGLISH VERSION OF THE QUESTIONNAIRE.....	49
ANNEX 2 AMHARIC VERSION OF THE QUESTIONNAIRE	55
ANNEX 3 MAP SHOWING THE STUDY AREAS	61
ANNEX 4 DECLARATION	62

List of Figures

Figure 1: Conceptual framework: Factors affecting patient satisfaction in the outpatient departments of district hospitals at South Wollo zone, Amhara region, North East Ethiopia, July 2013.....	8
Figure 2: Overall expectation towards the health service of patients seen at adult outpatient department of two district hospitals, South Wollo zone, Amhara region North East Ethiopia, July 2013 (N=290).....	22
Figure 3: Overall attitude towards the health service of patients seen at adult outpatient department of two district hospitals, South Wollo zone, Amhara region, North East Ethiopia, July 2013 (N=290).....	24
Figure 4: Map showing the study areas	61

List of Tables

Table 1: Socio-demographic characteristics of Patients at adult outpatient department of two district hospitals, South Wollo zone, Amhara region, North East Ethiopia July 2013 (N=290)	20
Table 2: Patients' expectation towards the health services at adult outpatient departments of two district hospitals, South Wollo zone, Amhara region, North East Ethiopia, July 2013 (N=290)	21
Table 3: Patients' attitude towards health services at adult outpatient department of two district hospitals, South Wollo zone, Amhara region, North East Ethiopia, July 2013 (N=290)	23
Table 4: Patient's satisfaction towards health services at adult outpatient department of two district hospitals, South Wollo zone, Amhara region, North East Ethiopia, July 2013	25
Table 5: Components of overall satisfaction at adult outpatient department of two district hospitals, South Wollo zone, Amhara region, North East Ethiopia, July 2013	27
Table 6: Bivariate analysis between independent variables and satisfaction of patients at adult outpatient department of two district hospitals, South Wollo zone, Amhara region, North East Ethiopia, July 2013	30
Table 7: Multivariate analysis between independent variables and satisfaction of patients at adult outpatient department of two district hospitals, South Wollo zone, Amhara region, North East Ethiopia, July 2013	33
Table 8: Patient's comments and suggestions for improving services at adult outpatient department of two district hospitals, South Wollo zone, Amhara region, North East Ethiopia, July 2013	34

Chapter One Introduction

1.1. Background

Patient satisfaction is patient's feeling of pleasure or disappointment resulting from comparing a service perceived performance on outcome in relation to his or her expectation. If the performance met the expectation, the patient is satisfied. If the performance exceeds expectation, the patient is highly satisfied. Hence Patient satisfaction is considered as one of the desired outcomes of health care and it is directly related to utilization of health care services (1). Also it related to more partnership building, more social conversation, courtesy, clear communication and information, respectful treatment, length of consultation, cleanliness of facility, and waiting time. In general patient satisfaction is a complex concept that is related to a number of factors including lifestyle, past experiences, future expectations and the value of both individual and society (2 - 5).

Measuring patient satisfaction has become an important part of hospital's management strategies across the globe. Moreover, the quality assurance and accreditation process in most countries require that the patient satisfaction should be measured on a regular basis (6).

Studies have showed that satisfied patients are more likely to utilize health services, comply with medical treatment, and continue with the health care providers (7, 8, 9).

Dansky and Miles state that from management point of view, Patient satisfaction with health care is important for various reasons.

1. Satisfied patients are more likely to continue a consistent relationship with specific health care provider.
2. By identifying source of patient satisfaction, an organization can tackle system weakness thus improving its' risk management.(8)

Patient's satisfaction with outpatient service is a way of secondary prevention of mortality and morbidity since satisfied patients are more likely to adhere to health providers' recommendations.

Therefore care given in the outpatient health service is critical for survival and well-being of patients' health. Poor patient satisfaction can lead to poor adherence to treatment with consequently poor health outcomes (8). Improvement on health care quality in the outpatient health services can be ensured by doing survey. Hence, the objective of this study was to assess the level of patient satisfaction and the associated factors in outpatient health care services in Boru-medra and Hidar 11 districts hospitals.

1.2. Problem Statement

“Health is the basic human need and fundamental of individual right”. It is the responsibility of the government and health care professionals to provide health care to all people in equal measures and to ensure the achievement of the health needs of the entire population. The health status of developing countries of the world is unhappy and intolerable; a large segment of the population in developing countries is poor of access to the basic health care (10).

A study conducted among seven developing countries, researchers who directly observed the clinical practice found that 75% of cases were not effectively diagnosed, treated or monitored. The most frequent stated explanation for the variation and low-quality care in the developing world was lack of resources. One study noted that despite having high expenditure and adequate facilities, patients were often not satisfied with the health care they received. Patients have explicit desires or requests for services when they visit hospitals. However, many cases of patient dissatisfaction can occur due to insufficient discovery of their needs. A recent study from Bangladesh reported that the most powerful factor for patient satisfaction with health service was provider behavior, especially respect and politeness (4, 11).

Poor countries tend to have less access to health service than richer ones. Lower middle income countries account for 90% of the global burden of disease but for only 12% of global spending on health. High income countries spend about 100 times more on health per capita than in low income countries (US\$ 3039 vs. US\$ 30). It is thus not surprising that the density of health workers and hospital beds per population are much lower in less middle income countries than in high income countries. Based on this Africa has < 1 bed/10000 population, doctor 0.49/1000 population, nurse 0.83/1000 population. America has 25 bed/10000 population, doctor 1.94/1000 population, and nurse 4.88/1000 population. Europe has 64 bed/10,000 population, doctor 3.2/1000 population, and nurse 7.43/1000 population. World report is 26 bed/10,000 populations, doctor 1.23 /1000 population, and nurse 2.56/1000 population.

12 most low income countries suffer from a severe shortage of health professional and Ethiopia is no exception. Ethiopia has health work force of 0.7/1000 population which is low compared with WHO recommendation of 2.3 health workers/1000 population.

In Ethiopia the low level of socio economic development resulting in one of the low standard of living, poor environmental condition and level of social service has been the main cause for a poor health status of the people. Several studies conducted in outpatient departments of different hospitals in the country revealed patient satisfaction level ranging from 22% in Gondar to 57.1% in Jimma. Long waiting hours during registration, visiting of doctor after registration, laboratory procedure and revisiting of the doctor for evaluation with laboratory results, failure to obtain prescribed medication from the hospitals and difficulties to locate different sections were the frequently faced problems affecting utilization leading to dissatisfaction (3, 4, 13).

Outpatient department problems like overcrowding, delay in consultation, lack of proper guidance and many others lead to patient dissatisfaction. According to the World Bank report in Ethiopia, the government runs most health facilities existing today and the public network has expanded dramatically over time. The government considers that the enjoyment of the highest attainable level of health is a basic right of every citizen; the mission is to protect the health of the people and supportive environment for health and provide preventive, curative, and rehabilitative service through an affordable and accessible health system (3, 8).

Currently in Ethiopia as indicated, the outpatient service satisfaction is still low in amahara region which is 22% as well as in the study areas. But the studies didn't incorporate the satisfaction dimensions. Which factor is most important determinant of patient satisfaction is not addressed.

Therefore, this study will have an important input in assessing the percent of patients' satisfaction, perception, and the relationship between socio-demographic characteristics on outpatient health care services, and provide a recommendation on an improved health service delivery that will be helpful to fill research knowledge gaps which ultimately contributes to enhance quality of patient services, by improving the percent of patients' satisfaction in in South Wollo zone, Amhara region at Boru Meda and Hedar 11 Hospitals.

Chapter Two Literature Review

2.1. Patient Satisfaction as a Measure of Quality of Care

Hospitals are important parts of any health system. They offer curative care, transfer knowledge, and work as referral for patients. To achieve service quality, hospitals require continuous effort on improving the feature of the service delivery system. In the health care industry, hospitals provide the same types of services, but they do not provide the same quality of service. Furthermore, patients today are more aware of alternatives on offering and rising standards of service, which increased their expectations. They are also becoming increasingly critical for the quality of service they experience (3, 10, 14, 15).

One aspect of health care quality that is being increasingly recognized for its importance is the influence of patient satisfaction. Even though the patient's satisfaction of quality relies more on the service aspects of health care, it relates well with objective measures of health care quality. A health care organization's ability to satisfy patient demand for convenience and information can significantly influence the quality of health care it finally delivers (3, 16, 17). In the simplest terms, "Total Quality Management Advocates" define quality as doing the right thing, right away. An essential factor to consider when analyzing the quality of care of a health facility is the perspective of the patient. For patients and communities, quality of care is something that meets their satisfaction needs. Since patient's needs often differ, their personal satisfaction ultimately depends on satisfaction, attitude and expectations of each individual (3, 10, 14, 18).

In its 1999 report, "The state of managed care quality", the US National Committee for Quality Assurance found that health plans with the highest satisfaction scores for the service aspects of health care also have the highest clinical quality scores. Addressing those service aspects of healthcare that patients most readily appreciate, such as access, provider relationship, availability of information and opportunity for participation can influence health care quality outcomes (3, 19, 11).

Furthermore, established evidences depicted that even though technical aspect of care has its impact on satisfaction, it is through interpersonal communication that the technology of western world reaches the patients and curing occurs. In addition, it is recognized more than ever that the quality of health care for the 21st century is built on the premise that optimal health care can best be achieved in the context of long term relationship between providers and patients. However, the issue of patient-provider interaction and its effect on the quality of care rendered at health care facilities is often ignored in medical researches and rarely subjected to scientific inquiry (20, 21)

2.2. Patient Satisfaction studies

Study in Singapore hospitals showed that out of the total 300 respondents, 30 (11.9%) rated the service quality very good, 122 (48.4%) rated the service quality good the service quality very good, 122 (48.4%) rated the service quality good, 70 (31.0%) rated the in Singapore hospitals showed that out of the total 300 respondents, 30 (11.9%) rated service quality fair, 18 (7.1%) rated the service quality poor and 4 (1.6%) rated the service quality very poor. In Africa there is general agreement that hospitals especially public sector hospitals perform poor. Other authors have noted that insufficient staffing and lack of supplies may impede the efficient delivery of health care to patients. (3).

Therefore, in low and middle-income countries alike, if services are available at all and they are often of low quality. So, many poor people by pass the closest public facility to go to more costly private facilities or choose better quality at more distant public facilities (3, 22, 23). This therefore indicates that health care systems in most developing countries suffer from serious deficiencies in financing, efficiency, equity, and quality and are poorly prepared to meet these challenges (24).

An in-depth study of the Iringa district of Tanzania, a poor rural area, showed that patients by passed low quality facilities in favors of those offering high quality consultation and prescriptions, staffed by more knowledgeable physicians and better stocked with basic supplies. In Egypt, participants in a discussion group complained about the attitude of staff at a local rural hospital with one respondent summing up the experience (3).

Another study in Mozambique, on satisfaction at the outpatient health care services showed 55% satisfaction rate and failure to receive prescribed medications was found to be the most common complaint associated with lower satisfaction rates (3, 25). Many studies also showed that patients equate availability of drugs with high quality services. In Kenya, a study reported that drug availability in health facility had a positive impact on demand for services. Another study in the Tororo district also concluded that the availability of drugs in the rural health facilities brought satisfaction not only to the users, but also to the providers (3).

In Ethiopia, health care services are limited and of poor quality and the country has extremely poor health status relative to other low-income countries (2). To solve this problem, the government has focused on improving the organization and quality of health services delivered to the population. This is because improving the poor quality of care delivered to patients is one of the strategies to reduce the burden of communicable diseases and plays a significant role in attaining the Millennium Development Goals (MDGs). By improving the availability affordable medicine for the world poor have made substantial progress towards increasing access to essential medicines and treatments to fight HIV/AIDS, malaria, and tuberculosis (26).

Roughly, more than 50% of health facilities are in urban areas and over 30% of the health facilities need either major repair or replacement. There were only 83 governmental hospitals in Ethiopia out of which 42 were zonal hospitals until up to 2002 G.C. Out of the total hospitals only 22 (29%) were in good condition while 37 (42%) need a major repair. Health professionals especially medical doctors usually tend to heavily concentrate in urban areas, particularly in Addis Ababa resulting in a severe shortage of manpower in most hospitals outside Addis Ababa (3).

This intention of the government was reflected in the 1993 health policy and the health sector development plans of the country. In such efforts towards improving quality of health care, patient satisfaction is integral component of health services provided to the population (2, 3, 27). It is generally agreed that satisfaction data play significant role in the strategy and tactics health care providers use in delivering services for patients. In addition, measurement of patient satisfaction is increasingly play important role in the growing push accountability among health care providers. It is also viewed as an established indicator of quality of care despite it will overshadow by measures of organizational aspects in the quality of health care equation (5, 15, 27).

2.3. Factor Associated with Patient Satisfaction

Empathy, which is a core component of consultation, is often seen as crucial to the effective achievement of patient satisfaction in that it encapsulates sensitivity to both the informational and emotional aspects of communication. Even though, many standards and codes of practice refer to the importance of empathy in medical consultation, it is an aspect of practice which is too often overlooked (2, 28). Besides, studies have documented that patient enablement also plays a significant role in outpatients' overall satisfaction (29). It is also clear from the literature that although system aspects such as cost, access, availability and waiting time are related to patient satisfaction, they have always been identified as being less important than the human aspect of medical care. However, system factors asymmetrically knockback, much of the research topics regardless of their little contribution (2, 3). This is particularly true in the case of developing countries such as Ethiopia where much of the scientific inquiries in the areas of patient satisfaction exclusively focus on organizational aspects (30).

A study in Jimma hospital showed 77% level of satisfaction with outpatient health services, The most frequently faced problems affecting utilization leading to dissatisfaction were, failure to obtain prescribed medications from the hospital pharmacy, long waiting time preceding consultation and difficulty to locate different section easily. A similar study on outpatient performance of a teaching hospital in Gondar town showed 22.0% satisfaction rate. Those long waiting hours during registration, visiting of doctors after registration, laboratory procedures and re-visiting of the doctor for evaluation with laboratory results and obtaining drugs from the hospitals' pharmacies were associated with dissatisfaction (2, 3, 4).

Therefore, factors related to quality that affect patient satisfaction include waiting time in the registration, examination rooms, laboratory procedures and availability of drugs and supplies in the hospital, courtesy of the health professionals and provision of information by the health professionals. Other factors like demographic, social structure, health belief, and enabling and need factors are additional factors that affect the satisfaction of patients (22, 31).

Having adequate information about these factors in the district hospitals is relevant in order to provide recommendations to improve the health service delivery and result in a better client satisfaction.

2.4 Conceptual frame work

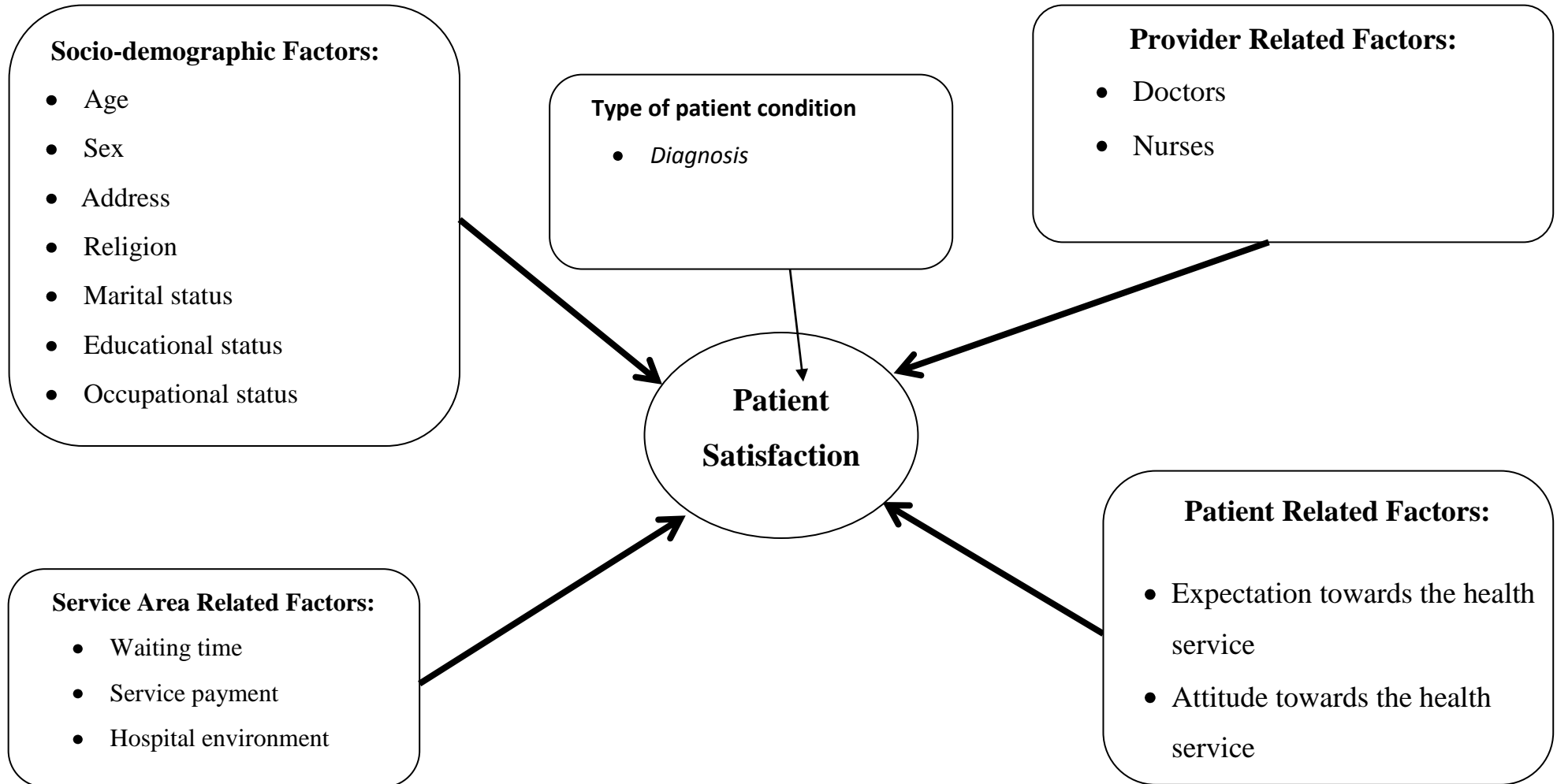


Figure 1: Conceptual framework: Factors affecting patient satisfaction in the outpatient departments of district hospitals in South Wollo zone, Amhara region, North East Ethiopia, July 2013

Chapter Three Significance of Study

The finding of this study will in general help the health management at a mid level and in particular those looking after the health institutions in woreda to understand the extent of the problem in the hospitals. The study will enhance the capacity to look for possible alternative solutions to health service delivery in collaboration with the hospitals. It will also contribute to increase the knowledge and awareness of the problem areas by concerned bodies including the hospital staffs.

Moreover, study will have an important input in assessing patient satisfaction on outpatient health care services and, identify the associated factors of patients' satisfaction, and provide recommendation(s) on how to improve the health service delivery that will be helpful to fill gaps, which ultimately contribute to enhance quality of outpatient services in Boru Meda and Hidar11 hospitals. In addition, the paper may be useful to other researchers as base line for further studies in the future.

Chapter Four Objectives

4.1 General objective

To assess patient satisfaction and powerful factors at outpatient department in Boru Meda and Hidar 11 district hospitals, July 2013.

4.2 Specific objectives

- To assess the percent of patient satisfaction with OPD services in the hospitals.
- To determine major factors of patients satisfaction with OPD services in the hospitals.

Chapter Five Methods

5.1 Study Area and Period

This study was conducted in two district hospitals in South Wollo zone, Amhara region, North East Ethiopia. The two districts hospitals are Boru Meda and Hidar 11 hospitals. Both hospitals' catchment population are 500, 000. Boru Meda hospital comprises of 34 technical and 78 administrative staffs whereas Hidar 11 hospital has 35 technical and 71 administrative staffs. They provide all basic health care services including medical, surgical, gynecological-obstetrics, eye unit, and maternity services. Boru Meda and Hidar 11 hospitals are far from Addis Ababa at 411 km & 501 km, and from Bahir Dar 491 km and 591 km respectively. The distance between the two hospitals is 90 km. The study period was from 7 June to 8 July 2013.

5.2 Study Design

Facility based cross sectional study was conducted, to assess patient satisfaction with outpatient service.

5.3 Population

5.3.1. Source population

All adults that can potentially receive care in the stated hospitals

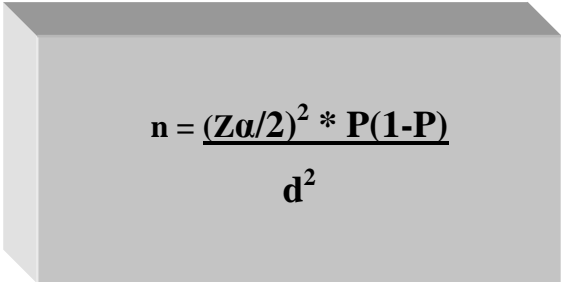
5.3.2. Study population

All patients who came for medical, surgical, gynecological, and ophthalmic treatment services during study period

5.4 Sampling Size Determination and Sampling Techniques

5.4.1. Sample size determination

Sample size (n) was estimated based on single population proportion using the following statistical formula:


$$n = \frac{(Z_{\alpha/2})^2 * P(1-P)}{d^2}$$

Where:

n = Estimated sample size

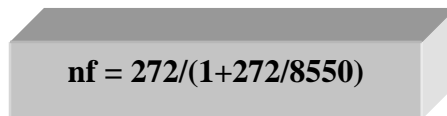
P = Proportion of satisfaction with OPD services (77 % overall satisfaction rate was cited in the research at Jimma University specialized hospital health survey, 2010).

Z = Value of standard normal distribution (Z-statistic) at the 95% confidence level i.e. 1.96.

d² = Degree of accuracy required i.e. allowable error 0.05

Accordingly, the calculated sample size was found to be 272.

By using adjusted sample size when study population size is < 10,000, n was found to be 272 and the population size estimated was 8550. Then,


$$n_f = 272 / (1 + 272 / 8550)$$

Where:

n_f was 264 by using the calculated formula, hence the final sample size with 10% non response rate was 290.

The sample size for each hospital is determined by taking the proportion of patients seen at the OPD within one month and divided by the total OPD patients seen in the hospital per month multiplied by 290 of total sample size. Accordingly, the allocated sample sizes for each hospital are 154 and 136 for Boru Meda and Hidar 11 hospitals respectively.

5.4.2. Sampling technique

Among the four public hospitals in south wollo, two district hospitals were selected by simple random sampling (lottery sampling). The number of OPD patients was determined by reviewing the annual document of each OPD patients visited in both district hospitals which was 50,060 in 2012/2013. Patients who full filled the inclusion criteria were selected by non-random sampling technique (convince sampling) until the allocated sample size was obtained in each of the hospitals.

5.5 Study Variables

5.5.1. Dependent variable

- Patient satisfaction (Consisting of convenience, courtesy, perceived quality of care, out of pocket cost, the physical environment)

5.5.2. Independent variable

- Socio demographic factors:
(age, sex, marital status, educational status, occupational status, religion, residence, , number of visits within the past six months, the type of payment for the health care service)
- Expectation towards the health service
(Service payment, perceived quality of care, waiting time, the hospital environment, information given about the patient's health)
- Attitude towards the health service

• Inclusion and Exclusion Criteria

5.6.1. Inclusion criteria

- All adult patients (>15years old) attending the OPD at the time of data collection

5.6.2. Exclusion criteria

- Patients who cannot speak (mute) and listen (deaf)

Data Collection Tools and Procedure

Structured questionnaire was developed for data collection after reviewing relevant literature and assessing internet sources. The questionnaire was adapted depending on the research objectives. It was designed to obtain information on socio-demographic characteristics of patients, their expectation and attitude towards the health service, and their satisfaction status measured by five components. Four experienced diploma nurses were recruited from non-study area for data collection. Data collectors and supervisors were debriefed about the objective of the study, method of data collection, and the procedure of the interview for one day. The interview was conducted using the structured questionnaire soon after the patients finished their hospital process during their exiting time from the hospital.

- **Operational Definitions**

Attitude:

- A cognitive perception of patients towards outpatient services that they get from hospital.
- Assessed by five questions each measured by 5-point Likert scale:
 - Strongly agree = 5,
 - Agree = 4,
 - Not sure=3,
 - Disagree=2, and
 - Strongly disagree =1

Overall attitude:

- The overall attitude has been found out through the following process.
 - The mean values of the five questions for each patient (N = 290) were calculated.
 - The mean value of the whole patients and the standard deviation then calculated.
 - The mean values of each patient categorized in to three as:
 - All those sum values greater than or equal to **mean + 2SD** were categorized as *good attitude*.
 - All those values between **mean - 2SD** and **mean + 2SD** were categorized as *fair attitude*.
- All those values less than or equal to **mean - 2SD** were categorized as *poor attitude*.

Expectation

- Refers to the state of expecting or looking forward to an event at the hospital a patient might expect to get treatment as soon as possible without delay.
- Patients' expectation towards the health service was assessed by five questions each having four choices.
- The mean values and the standard deviation of each question are calculated from the responses of the whole patient (i.e. 290).
- Each patient's response for each question is categorized into three as
 - *High expectation* ($\geq \text{mean} + 2\text{SD}$),
 - *Medium expectation* (between $\text{mean} - 2\text{SD}$ and $\text{mean} + 2\text{SD}$), and
 - *Low expectation* ($\leq \text{mean} - 2\text{SD}$).

Overall expectation:

- To get the overall expectation the steps followed were:
 - Each mean value of the five questions for each patient was calculated.
 - The standard deviation and the mean value of the whole patient were derived from the mean scores of each patient (i.e. 290).
 - Finally, the overall expectation is categorized into:
 - *High expectation* for all those means of each patient greater than or equal to $\text{mean} + 2\text{SD}$
 - *Medium expectation* for all those means of each patient between the $\text{mean} - 2\text{SD}$ and $\text{mean} + 2\text{SD}$
 - *Low expectation* for all those means of each patient less than or equal to $\text{mean} - 2\text{SD}$.

Satisfaction

- Refers to the patients' value judgments and succeeding reaction to the stimuli they perceive in the health environment just before, during, and after the course of their clinical visit.

Patient satisfaction is a person's feeling of pleasure or disappointment resulting from comparing a service perceived performance on outcome in relation to his or her expectation. The indicator for patients satisfaction in this study consists of five components, namely, convinces, courtesy, perceived quality of care, out of pocket payment, and physical environment. The five components in turn consisted of a total of 17 questions where each question is measured by five point Likert scale:

- Strongly agree = 5,
- Agree = 4,
- Not sure=3,
- Disagree=2, and
- Strongly disagree =1

Overall satisfaction by component:

- Steps followed in finding out the overall satisfaction by component:
 - Mean values were computed for each patient in each component.
 - Total mean values were calculated from the mean values of each patient for each component
 - The satisfaction level in each component was categorized in to two as:
 - **"Satisfied"** for all those mean values of each patient in each component greater than the total mean score value of that component
 - **"Not satisfied"** for all those mean values of each patient in each component less or equal to the total mean score value of that component

Overall satisfaction:

- The overall satisfaction is the satisfaction a patient obtained from the whole service.
- It is computed from the total 17 questions involving the following steps.
 - The mean value of the 17 questions computed for each patient (N=290).
 - Total mean is obtained from mean value of the whole patient.
 - Overall satisfaction was categorized into two as: Overall satisfaction was categorized into two as:
 - All those mean values of each patient greater than the total **mean** which is (3.9 cut-off point) score are categorized as "**satisfied**"
 - All those mean values of each patient less or equal to the total **mean** which is (3.9 cut-off point) score are categorized as "**not satisfied**"

Out Patient Department:

- Part of a hospital where patients get different services as an outpatient.
- It is the first step of getting the hospital's clinical services for medical, surgical, gynecology, and ophthalmologic treatments.

Perceived quality of care

- Patient's perception of fitness for use.
- Meeting the desires and expectation of patients.

Data Analysis Procedures

The data was checked for completeness, edited, cleaned, coded, and entered into computer and analyzed using SPSS version 16.00 windows software program. Descriptive statistics such as frequency, mean, minimum and maximum values of the study variables were presented on tables and figures accordingly. Bivariate and multivariate logistic regression analyses were conducted to observe the effects of independent variables on the outcome variable. First, the different independent variables were used in the bivariate analysis to assess their independent effect in terms of crude odds ratio and their 95% confidence interval. Next, a multivariate logistic regression analysis was undertaken containing all the independent variables that showed significant effect during the bivariate analysis at the 5% significance level, leading to adjusted odds ratio and their 95% confidence interval. P-values less than 0.05 were used as cut-off-point in both analyses.

- **Data Quality Management**

The questionnaire was prepared in English and then translated into Amharic and back to English to ensure accuracy, but finally it was administered in Amharic (the local language). The quality of data was ensured through briefing of data collectors. The questionnaire was pre-tested before the actual data collection using 5% of the sample size population in Mekaneselem hospital, which was having similar outpatient health service system with the study areas. Close supervision and immediate feedbacks were given. Each of the completed questionnaires was reviewed daily, and corrected problems which were seen during data collection. Data accuracy and completeness were checked throughout the data collection, entry, and analysis.

- **Ethical Consideration**

Ethical clearance was obtained from Jimma University College of Public Health and Medical Sciences (JUCPHMS) Ethical Review Committee. Official letters were submitted to the two district hospitals (Boru Meda and Hidar 11). The purposes and importance of the study were informed & explained for each patient and verbal consent was obtained from each patient. The patients were guaranteed verbally that the information they would give would be confidentially secured. The patients who were involved in the study were on a voluntary basis. They had the chance to ask anything about the study and to accept or refuse giving their opinion at any time they wanted. Each interview has been conducted within 20 – 25 minutes period.

- **Dissemination Plan**

The findings of this study will be submitted to Jimma University, College of Public Health and Medical Sciences, Department of Health Service Management. Then the findings of the study will be publicly defended at Jimma University. After approval by the department, copies of the study will be provided to relevant stakeholders including Woredas, Zonal and Regional Health Bureau and to both district hospitals. Efforts will be made to present the results at scientific conferences and to publish on national or international journals.

Chapter Six Results

6.1 Socio-Demographic Characteristics of the Patients

There were a total of 290 patients who were enrolled in the study with 100% response rate. Of whom 153 (52.8%) of the patients were males. The mean age of the patients was 33.3 years with standard deviation of 10.883 where the minimum and the maximum ages were 15 and 80 years respectively.

The address of these patients comparatively comprised both from urban and rural areas 147 (50.7%) and 143 (49.3%) respectively. Three fourth, 219 (75.5%) of the patients were Muslim in religion followed by Orthodox 58 (20.0%). More than half, 172 (59.3%) of the patients were married. Majority 85 (29.3%) cannot read and write. Almost half 138 (47.6%) of the patients were farmers. Of the 290 patients, 160 (55.2%) of them visited the hospital more than once within the past six months. Two hundred and seven (71.4%) of the patients paid for the health care service they received from the hospital by themselves (**Table 1**).

Table 1. Socio-demographic characteristics of patients at adult outpatient department of two district hospitals, South Wollo zone, Amhara region, North East Ethiopia, July 2013 (N=290).

Socio-demographic factors	<i>Frequency</i>	<i>%</i>
Age		
15-20	28	9.7
21-34	144	49.7
>34	118	40.7
Sex		
Male	153	52.8
Female	137	47.2
Address		
Rural	143	49.3
Urban	147	50.7
Religion		
Orthodox	58	20.0
Muslim	219	75.5
Protestant	13	4.5
Marital status		
Married	172	59.3
Unmarried	95	32.8
Divorced	12	4.1
Widow/ Widower	11	3.8
Educational status		
Cannot read and write	85	29.3
Can read and write	74	25.5
Primary school	46	15.9
Secondary school	45	15.5
College/ University	40	13.8
Occupational status		
Government employee	33	11.4
Private employee	27	9.3
Student	36	12.4
Self employed	43	14.8
Unemployed	13	4.5
Farmer	138	47.6
Number of hospital visits within the past 6 months		
Once	130	44.8
More than once	160	55.2
Type of payment for the health service		
Private scheme	207	71.4
Government scheme	14	4.8
Insurance	9	3.1
Free	60	20.7

6.2 Expectation towards the Health Service

Patients' expectation towards the health service was assessed by five questions each having four choices. In the entire five questions majority, more than 90%, of the patients were found to have medium expectation. The lowest rate of frequency was found for the surrounding of the hospitals environment. The frequency and percentage distribution of each question is depicted on **table 2**.

Table 2. Patients' expectation towards the health services at adult outpatient departments of two district hospitals, South Wollo Zone, Amhara region, North East Ethiopia, July 2013 (N=290)

Variables	Frequency and Percent (%)		
	High	Medium	Low
Expectation to the total cost paid out of your pocket for the health service	0	276 (95.2%)	14 (4.8%)
Expectation towards perceived quality of care	0	276 (95.2%)	14 (4.8%)
Expectation towards the waiting time	0	275 (94.8%)	15 (5.2%)
Expectation towards the surrounding of the hospital	0	269 (92.8%)	21 (7.2%)
Expectation about the information that you would get from the doctor concerning your illness	0	277 (95.5%)	13 (4.5%)

Overall expectation:

The overall expectation towards the health service is depicted on **figure 2**. Majority of the patients 277 (95.5%) had medium overall expectation towards the health service.

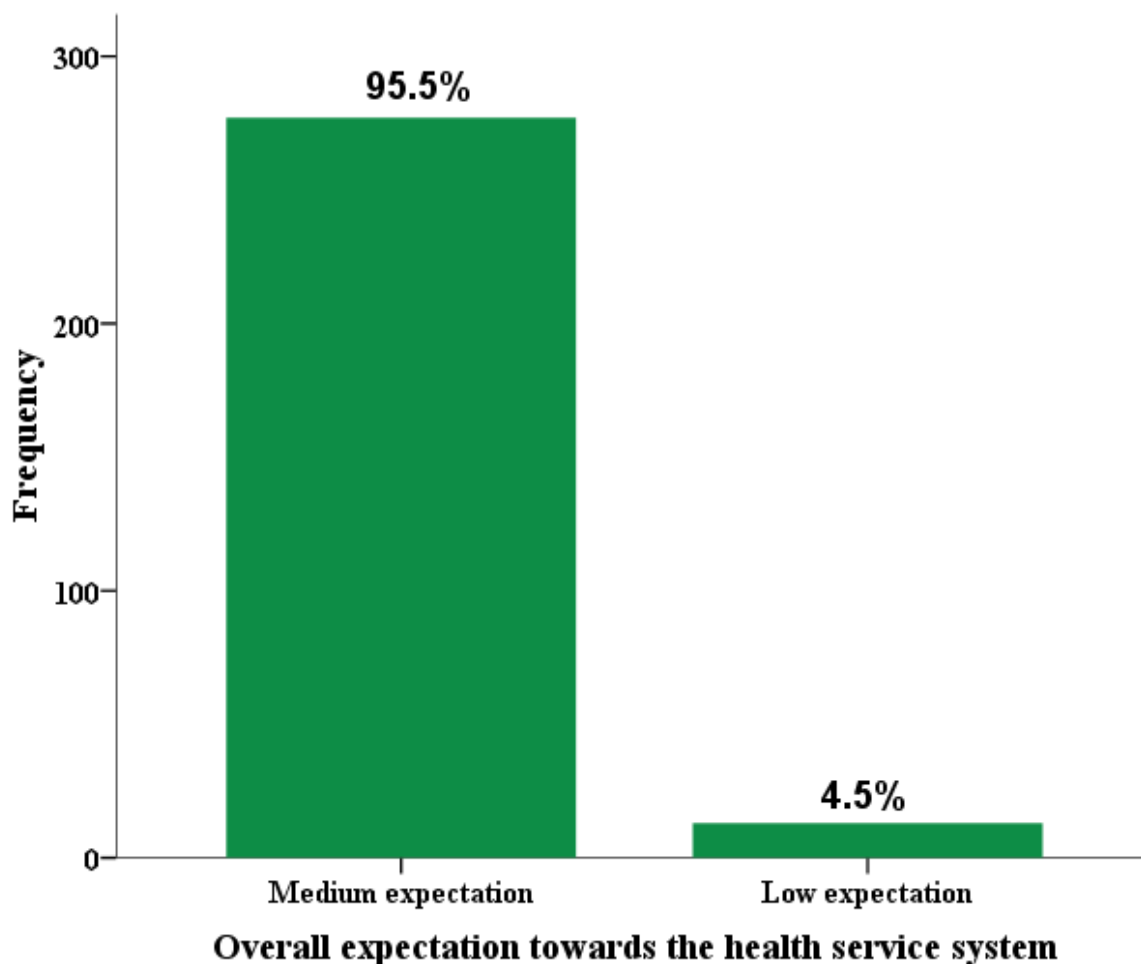


Figure 2. Overall expectation towards the health service of patients seen at adult outpatient department of two district hospitals, South Wollo zone, Amhara region, North East Ethiopia, July 2013 (N=290)

6.3 Attitude towards the Health Service

The attitude of the patients towards the health service they received was assessed by five questions each measured by 5-point Likert scale. More than half 186 (64.1%), 180 (62.1%), 158 (54.5%), and 161 (55.5%) of the patients agreed that the doctors are competent, the overall health care service is good, the queuing system of the hospitals is trouble free, and the medical staff treats in a friendly and courteous manner respectively. Hundred and sixty

(55.2%) of patients strongly disagree that the doctors are business-oriented. **Table 3** shows the frequency and percentage of each question for each Likert scale measurement.

Table 3. Patients' attitude towards health services at adult outpatient department of two district Hospitals, South Wollo zone, Amhara region, North East Ethiopia, July 2013 (N=290)

Questions	Frequency and Percent (%)				
	Strongly agree (5)	Agree (4)	Uncertain (3)	Disagree (2)	Strongly Disagree (1)
The queuing system is trouble free.	105 (36.2%)	158 (54.5%)	3 (1.0%)	13 (6.2%)	6 (2.1%)
The doctors are competent.	68 (23.4%)	186 (64.1%)	17 (5.9%)	12 (4.1%)	7 (2.4%)
The doctors are business-oriented.	10 (3.4%)	16 (5.5%)	67 (23.1%)	37 (12.8%)	160 (55.2%)
The medical staff treats in a friendly and courteous manner.	64 (22.1%)	161 (55.5%)	43 (14.8%)	19 (6.6%)	3 (3.4%)
The overall health care service is good.	87 (30.0%)	180 (62.1%)	19 (6.6%)	2 (0.7%)	2 (0.7%)

Overall attitude:

Most of the patients were found to have fair attitude 283 (97.6%) followed by poor attitude 7 (2.4%), and poor attitude 55 (19.0%) (**Figure 3**).

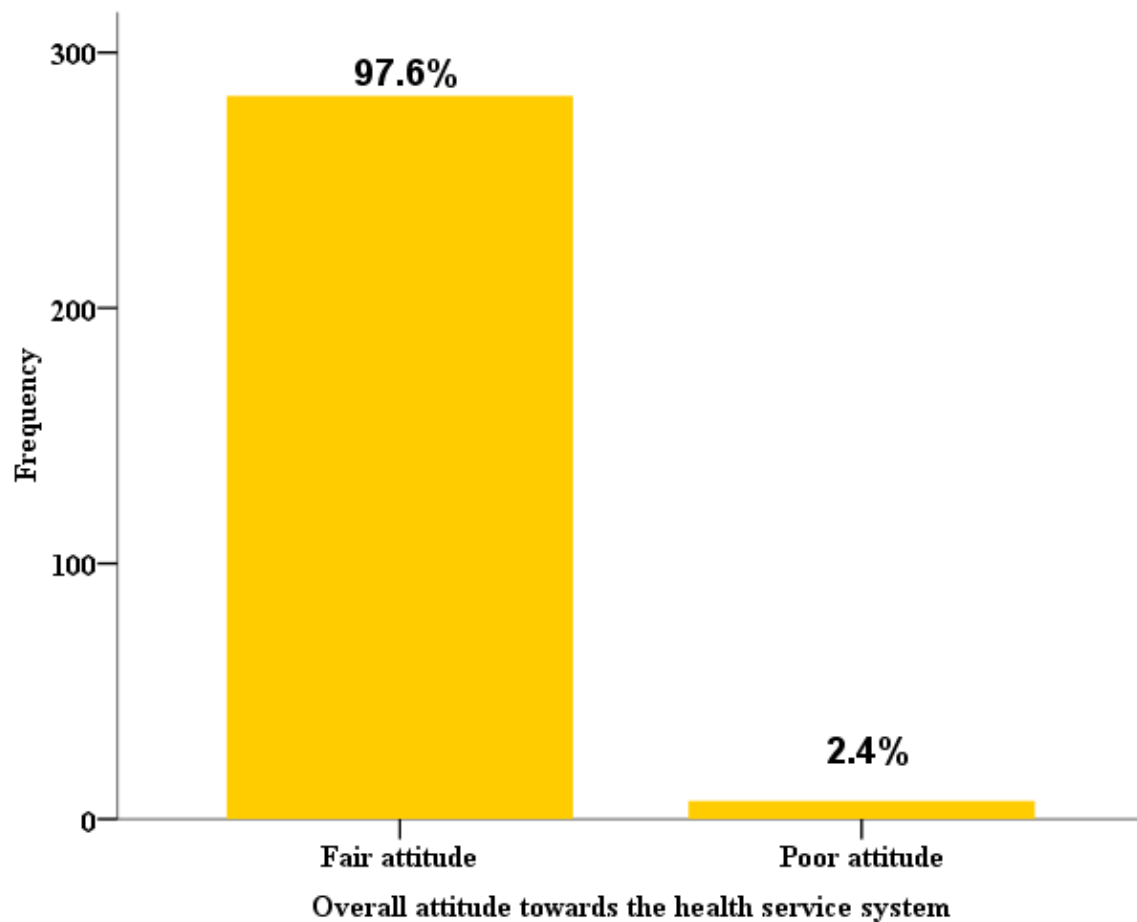


Figure 3. Overall attitude towards the health service of patients seen at adult outpatient department of two district hospitals, South Wollo zone, Amhara region, North East Ethiopia, July 2013 (N=290)

6.4 Satisfaction towards Health Service

The satisfaction level of the patients comprised of five components with a total of 17 questions where each question is measured by five point Liker scale. The percentage distribution of the five main components is shown on **table 4**.

Table 4. Patient's satisfaction towards health services at adult outpatient department of two district hospitals, South Wollo zone, Amhara region, North East Ethiopia, July 2013

Questions	Frequency and Percent (%)				
	Strongly Agree (5)	Agree (4)	Uncertain (3)	Disagree (2)	Strongly Disagree (1)
Convenience					
The service system is simple and trouble free.	98 (33.8%)	160 (55.2%)	19 (6.6%)	12 (4.1%)	1 (0.3%)
Medical instruments are available.	52 (17.9%)	150 (51.7%)	78 (26.9%)	9 (3.1%)	1 (0.3%)
Nurses are available for counseling.	72 (24.8%)	155 (53.4%)	31 (10.7%)	18 (6.2%)	14 (4.8%)
The arrangement of the waiting area is good.	79 (27.2%)	173 (59.7%)	15 (5.2%)	13 (4.5%)	10 (3.4%)
Doctors are available for consultation.	65 (22.4%)	158 (54.5%)	29 (10.0%)	26 (9.0%)	12 (4.1%)
Courtesy					
The service is provided in a friendly and courteous manner.	68 (23.4%)	174 (60.0%)	26 (9.0%)	13 (4.5%)	9 (3.1%)
Doctors and nurses are attentive while listening and answering questions.	84 (29.0%)	171 (59.0%)	16 (5.5%)	11 (3.8%)	8 (2.8%)
The service providers give appropriate time for medical evaluation.	91 (31.4%)	157 (54.1%)	19 (6.6%)	16 (5.5%)	7 (2.4%)
Service providers keep privacy before doing any procedure.	85 (29.3%)	160 (55.2%)	29 (10.0%)	12 (4.1%)	4 (1.4%)

Table 4. Patient's satisfaction towards health services at adult outpatient department of two district hospitals, South Wollo zone, Amhara region, North East Ethiopia, July 2013 (Contd.)

Questions	Frequency and Percent (%)				
	Strongly Agree (5)	Agree (4)	Uncertain (3)	Disagree (2)	Strongly Disagree (1)
Perceived quality of care					
Health care providers are competent for treating patients.	64 (22.1%)	143 (49.3%)	64 (22.1%)	16 (5.5%)	3 (1.0%)
The quality of instruments used for medical care is good.	40 (13.8%)	146 (50.3%)	89 (30.7%)	10 (3.4%)	5 (1.7%)
Doctors examine patient carefully.	80 (27.6%)	170 (58.6%)	18 (6.2%)	14 (4.8%)	8 (2.8%)
Out of pocket payment					
Cost of medical services is affordable.	41 (14.1%)	205 (70.7%)	12 (4.1%)	18 (6.2%)	14 (4.8%)
Physical environment					
The environment of the OPD is clean and tidy.	113 (39.0%)	160 (55.2%)	11 (3.8%)	5 (1.7%)	1 (0.3%)
Seating chairs are available at the waiting area.	99 (34.1%)	146 (50.3%)	5 (1.7%)	29 (10.0%)	11 (3.8%)
Pure water is available and the toilets are clean.	25 (19.7%)	132 (45.5%)	32 (11.0%)	35 (12.1%)	34 (11.7%)
There are clear signs and directions.	108 (37.2%)	141 (48.6%)	26 (9.0%)	13 (4.5%)	2 (0.7%)

Overall satisfaction by component:

Two-hundred and forty six (84.8%) patients were satisfied by the cost of medical services. Majority of patients were satisfied by the physical environment of the hospitals 190 (65.5%), convenience 183 (63.1%), and perceived quality of health care services 177 (61.0%). About two-third of the patients 182 (62.8%) were not satisfied by courtesy (**Table 5**).

Table 5. Components of overall satisfaction at adult outpatient department of two district hospitals, South Wollo zone, Amhara region, North East Ethiopia, July 2013

Components of Satisfaction	Level of Satisfaction	
	Satisfied N (%)	Not Satisfied N (%)
Convenient	183 (63.1)	107 (36.9)
Courtesy	108 (37.2)	182 (62.8)
Perceived quality of care	177 (61.0)	113 (39.0)
Out of pocket cost	246 (84.8)	44 (15.2)
Physical environment	190 (65.5)	100 (34.5)

6.5 Factors Associated with Satisfaction towards the Health Service

During the bivariate analysis, among the socio-demographic variables marital status, educational status, occupational status, and the type of payment for the service became significant at $p\text{-value} < 0.05$. From the remaining variables, expectation towards the service charge, expectation towards the waiting time, expectation towards the information given to the patients about their illness, and the overall attitude towards the health care service were found to be significant (**Table 6**). In the multivariate analysis three predictors remained to be significant: patients' expectation towards waiting time, the overall attitude of a patient towards the health service, and expectation towards the information patients receive about their illness (**Table 7**).

Thus, Patients who have medium expectation towards waiting time have 7.76 times more likely satisfied than those patients who have low expectation (95%CI of $/.036\text{-}0.935/$). The satisfaction score for patients having fair attitude towards the health service delivery system was found 4.1 times more likely satisfied as compared to those patients having poor attitude (95% CI of $[014\text{-}012]$). Those patients with medium expectation towards the information they would receive about their illness were found 4.78 times more likely satisfied when compared to those having poor expectation ((95% CI of $[039\text{-}092]$).

Table 6: Bivariate analysis between independent variables and satisfaction of patients at adult outpatient department of two district hospitals, South Wollo zone, Amhara region, North East Ethiopia, July 2013

Variables	Level of Satisfaction		COR /95%CI/
	Satisfied N (%)	Not Satisfied N (%)	
Socio-demographic characteristics			
Sex			
Female‡	64 (46.7%)	73 (53.3%)	1
Male	76 (49.7.7%)	77 (50.3%)	1.125 (.560-1.409)
Address			
Urban‡	70 (47.6%)	77 (52.4%)	1
Rural	70 (49.0%)	73 (51.0%)	1.053 (0.598,- 1.503)1
Religion			
Muslim‡	100 (45.7%)	119 (54.3%)	1
Orthodox	33 (56.9%)	25 (43.1%)	1.428 (0.35-1.14)1
Protestant	7 (53.8)	6 (46.2)	1.39 (0.264_ 2.96)
Age			
15-20	8 (28.6%)	20 (71.4%)	1
21-34‡	67 (46.5%)	77 (53.3%)	2.175 (0.90- 5.26)
>34	65 (55.1%)	53 (44.9%)	3.066 (1.25_7.52) *
Marital status			
Married‡	82 (47.7%)	90 (52.3%)	1
Unmarried	41 (43.2%)	54 (56.8)	.833(.503_1.38)
Divorced	7 (58.3%)	5 (41.7%)	1.54 (.47-5.03)
Widow/ Widower	10 (90.9%)	1 (9.1%)	10.976(1. 375_87.616) *
Number of visits within the past six months			
Once‡	62 (47.7%)	68 (52.3%)	1
MorethanOnce	78 (48.8%)	82(51.2%)	1.04 (0.66-1.66)

‡ Reference category having highest frequency

* Statistically significant at p-value <0.05

Table 6: Bivariate analysis between independent variables and satisfaction of patients at adult outpatient department of two district hospitals, South Wollo zone, Amhara region, North East Ethiopia, July 2013 (Contd)

Variables	Level of Satisfaction		COR /95%CI/
	Satisfied N (%)	Not Satisfied N (%)	
Educational status			
Cannot read and write	55 (64.7)	30 (35.3)	2.543 /0.47- 1.66/1
Can read and write‡	31 (41.9)	43 (58.1)	1
Primary School	25 (54.3)	21 (45.7)	1.54 /0.26- 1.10/
Secondary School	28 (62.2)	17 (37.8)	2.275 /0.18- 0.81/*
College/ University	23 (57.5)	17 (42.5)	1.876 /0.219- 1.001/
Occupational status			
Farmer‡	56 (40.6)	82 (59.4)	1
Private employee	21 (77.8)	6 (22.2)	5.124 /0.936-9.092/
Student	15 (41.7)	21 (58.3)	1.050 /0.229-1.554/
Self employed	23 (5.5)	20 (46.5)	1.684/0.386-2.381/
Unemployed	7 (53.8)	6 (46.2)	1.708 /0.268-3.524/
Government employee	18 (54.5)	15 (45.5)	1.756/0.265-1.233.1
Type of payment for the service			
Private scheme‡	96 (46.4)	111(53.6)	1
Government scheme	9 (64.3)	5 (35.7)	2.081 (.674- 6.422)
Insurance	8 (88.9)	1 (11.1)	9.250 (1.136-75.29) *
Free	27 (45.0)	33 (55.0)	1.94 (0.531_1.685)
Expectation towards the health service charge			
Medium expectation‡	129 (46.7)	147 (53.3)	1
Low expectation	11 (78.6)	3 (21.4)	1.759/ (1.008-3.070)*
Expectation towards the quality of the health service			
Medium expectation‡	131 (47.5)	145 (52.5)	1
Low expectation	9 (64.3)	5 (35.7)	1.199(0.651-6.097)

‡ Reference category having highest frequency

* Statistically significant at p-value <0.05

Table 6: Bivariate analysis between independent variables and satisfaction of patients at adult outpatient department of two district hospitals, South Wollo zone, Amhara region, North East Ethiopia, July 2013 (Contd)

Variables	Level of Satisfaction		COR /95%CI/
	Satisfied N (%)	Not Satisfied N (%)	
Expectation towards the waiting time			
Medium expectation‡	127 (46.2)	148 (53.8)	1
Low expectation	13 (86.7)	2 (13.3)	7.575(1.678-34.202) *
Expectation towards the hospital environment			
Medium expectation‡	127 (47.2)	142 (52.8)	1
low expectation	13 (61.9)	8 (38.1)	1.817 (.728-4.526)
Expectation towards the information given about the patient's illness			
Medium expectation‡	129 (46.6)	148 (53.4)	6.310(1.373-28.996) *
Low expectation	11 (84.6)	2 (15.4)	1
Overall attitude towards health services			
Fair attitude‡	140 (48.3)	135 (46.5)	1
Poor attitude	8(.2.7)	7 (2.4)	1.098 (.016-0.129) *.

‡ Reference category having highest frequency

* Statistically significant at p-value <0.05

Table7: Multivariate analysis between independent variables and satisfaction of patients at adult outpatient department of two district hospitals, South Wollo zone, Amhara region, North East Ethiopia, July 2013

Predictors	Level of Satisfaction		AOR /5%CI
	Satisfied N (%)	Not Satisfied N (%)	
Educational status			
Cannot read and write‡	55 (64.7)	30 (35.3)	1
Can read and write	31 (41.9)	43 (58.1)	.683 /.318-1.470)
Primary school	25 (54.3)	21 (45.7)	1.134(.450-2.856)
Secondary school	28 (62.2)	17 (37.8)	1.956(.7445-1.142)
College/ University	23 (57.5)	17 (42.5)	1.74(1.666-4.547)
Expectation towards the information one would obtain about their illness			
Medium expectation	129 (46.6)	148 (53.4)	4.78 (.039-0.92) *
Low expectation‡	2 (15.4)	11 (84.6)	1
Overall attitude towards the health service			
Fair attitude‡	140 (78.6)	38 (21.4)	1
Poor attitude	105(93.75)	7 (6,25)	4.076 (.014-012) *
Type of payment for the service			
Private scheme‡	96 (46.4)	111(53.6)	1
Government scheme	9 (64.3)	5 (35.7)	2.08 (427 6.367)
Insurance	8 (88.9)	1 (11.1)	9.248 (453-58.224)
Free	32 (49.2)	33 (50.8)	1.121 (749-3.076)
Age			
15-20‡	8 (28.6%)	20 (71.4%)	1
21-34	67 (46.5%)	77 (53.3%)	2.175 (.420-3.24)
>34	53 (44.1%)	65(55.9)	2.03 (.200-1.60)

‡ Reference category having highest frequency

Predictors	Level of satisfaction		AOR/95%CI
	Satisfied	Not satisfied	
Expectation towards the waiting time			
Medium expectation‡	127 (46.2)	148 (53.8)	1
poor expectation	13 (86.7)	2 (13.3)	7.575 (.036-.935)*
Marital status			
Married	82 (47.7%)	90 (52.3%)	1.200(.503-1.360)
Unmarried‡	41 (43.2%)	54 (56.8)	1
Divorced	7 (58.3%)	5 (41.7%)	1.844(.469- 5.031)
Widow/ Widower	10 (90.9%)	1 (9.1%)	13.175 (1.37587.616)

‡ Reference category having highest frequency

* Statistically significant at p-value <0.05

6.6 Patients' Comments and Suggestion Given to Improve the Quality of Health Care Services at Two District Hospitals, South Wollo Zone, Amhara Region, North East Ethiopia, July 2013

Of 290 patients only 155 (53.4%) patients gave comments and suggestions to improve the quality of health care service delivery system in the two district hospitals. Seventy-six (49.1%) of the patients gave constructive comments and suggestions. The rest 79 (50.9%) patients gave positive comments and suggestions where by the hospitals are providing satisfactory health care service to the community. These patients also suggested that the hospitals need to continue with the health care service they are providing.

The constructive comments and suggestions mainly focused on the physical environment of the hospitals followed by courtesy, convenience, out of pocket cost and perceived quality of care. Shortage of sitting chairs and cleanliness of the toilets are the main areas where most comments and suggestions were given regarding the physical environment of the hospitals. Courteousness of the hospital staff is the other area where most comments and suggestions were given regarding courtesy. Many patients gave more than one comment and suggestion (**Table 8**).

Table 8: Patient's comments and suggestions for improving services at adult outpatient department of two district hospitals, South Wollo zone, Amhara region, North East Ethiopia, July 2013.

Comments and Suggestion	Frequency (N=76)
Convenience	19
Shortage of human power should be improved.	10
Shortage of drugs should be improved.	2
Shortage of medical instruments should be improved.	2
Care takers should be more than one person.	1
Place for care takers should be prepared.	1
Doctors should give ample time for the patients.	1
Shortage of toilets should be solved.	1
Laboratory results should be provided timely.	1

Table 8: Patient's comments and suggestions for improving services at adult outpatient department of two district hospitals, South Wollo zone, Amhara region, North East Ethiopia, July 2013 (Contd.)

Comments and Suggestion	Frequency (N=76)
Courtesy	26
Health care providers should be courteous.	13
Punctuality should be improved.	8
Card room workers biases should be corrected.	3
Doctors should carefully examine patients.	1
Nurses should be fast enough in giving the service.	1
Perceived quality of care	9
Delay of discharge from the hospital should be improved.	1
Patients' card should be made available timely before the doctors enter their office.	2
The health care providers are not competent.	6
Cost	13
HIV voluntary testing should be provided free of charge (during marriage).	1
The payment for drugs is costly.	9
The payment for card is costly.	1
The drugs for blood pressure and diabetes should be provided free of charge.	1
Laboratory investigations are costly.	1
The physical environment	28
The bed side lockers should be clean.	1
Clean water supply should be made available.	4
Shortage of sitting chairs should be corrected.	10
Toilets should be clean.	11
The signs and directions that indicate where to go are not easy to follow (especially for those who cannot read and write).	2

Chapter Seven Discussion

This facility based cross sectional study showed health service delivery satisfaction status of patients and those factors associated with satisfaction at adult outpatient department of two district hospitals, South Wollo zone, Amhara region, North East Ethiopia.

The overall satisfaction level of this study, 48.3%, is found to be higher when weigh against the studies conducted in Tigray zonal hospitals, Tigray Region, Ethiopia (43.6%) and Indira Gandhi Memorial Hospital, Male' Maldives (10.4%) (3, 8). But it is found to be lower as compared to previous studies (93.2%, 77%, 62.6%, 57%) (2, 5, 7, 17, 21, 22). Being district hospitals, there is shortage of health professionals (especially specialist) and scarcity of better diagnostic facilities which could explain the lowest satisfaction rate of health care delivery as compared to previous studies.

The low rate of satisfaction could also be due to difference in expectation of patients. As pointed out in the association of this study, it is found out that all those patients who had low expectation towards the information they would receive about their illness were found more likely not to be satisfied as compared to those patients with a better or higher expectation for information.

The other possible reason for the low rate of satisfaction could be the difference in methodology. For example, the cut-of-point for classification of satisfaction in the current series is the mean score value of the total patients. Other studies use different classification of cut-of-point. The study in IGMH, Male' Maldives use the cut-of-point of 80% total score to classify as high and low satisfaction (8). But this low satisfaction rate is comparable with the study conducted at public and private hospitals in Addis Ababa, Ethiopia where the satisfaction level at private hospitals was 47.9% (11).

On each component of overall satisfaction, the current study has shown a different pattern as compared to the study in IGMH, Male' Maldives. The highest level of satisfaction was seen on out-of-pocket cost (84.8% satisfaction rate), but in IGMH the highest level of satisfaction was for courtesy (45.8%). In the current study the lowest level of satisfaction was on courtesy (62.8%) whereas in IGMH it was on the out-of-pocket cost (76.5%). In particular to the cost of the health service, the difference in the findings of these two studies is probably because

the government of Ethiopia has covered much of the cost for the services so that the people may get the service with low affordable cost.

The analysis of factors associated with satisfaction found out that, in the current study none of the socio-demographic characteristics, of the patients was found to be significantly associated with the level of satisfaction. As Addisu on his paper work pointed out socio-demographic variables do not have consistence pattern of association with patient level of health care satisfaction (32). For example, on the study done by Birna Abdosh on the quality of hospital services in eastern Ethiopia, it was stated that no relationship had been observed between level of satisfaction and age or educational status (22). In contrary few other studies pointed out the existence of direct or inverse relationship between the socio-demographic characteristics and level of satisfaction (5, 10, 11).

Tatek T. et al during their study on determinants of patient satisfaction with outpatient health services at public and private hospitals in Addis Ababa, Ethiopia, have found out two different results in a single paper work. One of their finding pointed out that at the private hospitals, out of all the socio-demographic variables, occupational status and educational status were found to have a statistically significant association with the patient satisfaction score. However, at the public hospitals none of the socio-demographic variables showed association with the patient satisfaction scores (11).

The studies in six regions of Ethiopia and at IGMH, Male' Maldives showed that one of the socio-demographic characteristics, sex, was found to be insignificant for influencing the satisfaction level of a patient which is similar finding as that of this study (7, 8). Despite the absence of statistically significant association ($P=0.615$), the analysis has shown that male patients were more satisfied with the health care service than their female counterparty (49.7% vs. 46.7%) which is in contrary to previous studies where females were found more satisfied than males (87.4% vs. 34.2%, 11.5% vs. 7.8%, 62% vs. 51.6%) (2, 7, 8, 21). This is probably because women generally want more information than they received while men will be satisfied with what they are told. In addition, women incline to be less satisfied with the hygiene of hospital surroundings (33).

Though there is no statistically significant association between the age of the patient with the satisfaction level ($P=0.084$ & 0.169), in the current study it is observed that the percentage of

satisfaction of those patients older than 34 years found to be higher than the younger age group (16-21). This finding is in agreement with other studies where most studies have found that older patients tend to be more satisfied with the health care than do younger people. This might be due to the fact that older age group patients have confidence in medical care system and satisfaction in life in general (5, 21). But this finding is in contrast with the report by Asma I. and Girmay A. where younger patients were more satisfied (12% vs. 10.2%, 99% vs. 90%) (3, 8, 32).

In the current study amongst the socio-demographic variables, even though educational status of the patients that became insignificant to determine the satisfaction level of the patients. The study has shown that patients who cannot read and write were found to be more likely to have higher satisfaction level (64.7% satisfaction rate) than those patients whose educational status is at the secondary level (62.2% satisfaction rate). This same finding was observed in the studies at Deberebirhan referral hospital, North Shoa Ethiopia, Jimma University Specialized Hospital, and Bangladish. In these studies it was shown that higher educational status was associated with low satisfaction score (8, 16, 21, 32). But this finding is in contrast to the study at Tigray zonal hospitals where patients who had higher education status (diploma and above) were more satisfied as compared to the illiterates (3). The lower rate of satisfaction level in the educated group than those who cannot read and write in the current study is probably because of the expectations of higher standards by the educated group i.e. patients with higher levels of education probably make greater demands on service given by doctors or nurses, which might lead to expectations of more information and a higher level of education from health workers (5).

The marital status in the current study has shown similar pattern as that of previous series (30). The married and the divorced group were found to be more satisfied than the unmarried and the widow/ widower. This might be due to the fact that these population groups utilized more medical services as compared to the unmarried and this frequent exposure to the health services might affect the satisfaction level (8, 21). This finding, however, is in contrary to the study at selected health facilities in six regions of Ethiopia where patients who were divorced or widowed were 45% less likely to have high satisfaction score (7).

The association between occupation and satisfaction level of patients was not detected by statistical test. But the study has pointed out that private employee patients were found more

satisfied (77.8%) than government employee patients (54.5%). When compared with study conducted by Fekadu A. et al, in contrary, government employees were at the third level of satisfaction (11.4%) next to farmers (48.6% satisfaction level) and students (11.6% satisfaction level) having a statistical significant p-value level of 0.002 (3, 5, 36). In the current study government employee patients were found less satisfied probably because employees' satisfaction appears to have strong relationship with the quality of health care service delivered and service cost (36).

The patient's frequency of visits to the outpatient department was not found to statistically influence the patient's satisfaction. It was believed that the higher the number of visits, the lowest the level of satisfaction because this was thought to be related to the higher likelihood of social factors not being addressed in these frequent users of the hospitals' services (8). This study has demonstrated that the level of satisfaction in those patients who visited the hospitals once or more than once is comparatively the same (47.7% vs. 48.8%). This is probably because the patients do not have any choice or other means to get better health services other than the two district hospitals in the two towns, so if they utilize more than once or less the quality of care remains the same.

This study could not demonstrate any significant influence of the type of payment for the health care service on patient's level of satisfaction. It is shown that patients who pay through an insurance scheme were found to be most satisfied (88.9%). This is probably because they do not directly pay; they do not bother much about the cost of the service. This finding is different from the study in IGMH, Male' Maldives where those who pay through private scheme were most satisfied (11.7% satisfaction rate) (8).

In this study, the results of the overall expectation towards the health service delivery in the two district hospitals showed that patients with low level of overall expectation towards the health service were found to be most satisfied (61.5% satisfaction rate) whereas those having medium level of expectation were least satisfied (47.7%). Though the association between expectation and satisfaction was not significantly associated in the current study, this finding is in contrary to previous findings where having low expectation for hospital services lowered the satisfaction score in the studies at public and private hospitals in Addis Ababa, Ethiopia (4.5% satisfaction rate) and IGMH, Male' Maldives (1.9% satisfaction rate) (8, 11).

It was observed that patients got higher expectation when they were satisfied with health services. The finding of this study is contrary to the two previous studies in Addis Ababa and Male' Maldives proves that the general assumption of the prevailing model of satisfaction that states patient's expectation only has indirect effect on their level of satisfaction (3,35).

The other possible explanation for the high level of satisfaction in patients with low level of expectation is that because the two district hospitals are the first level in the referral system, patients do not usually expect a better health care delivery system so they tend to come to these hospitals with low expectation. Interestingly enough, because they got beyond their expectation, their satisfaction level became the highest.

Health care providers have an ethical duty to teach the patients about their illness and promotion of health in every opportunity (2). The current study has shown that one of the five components where by overall expectation was measured, the patients' expectation towards the information they would receive about their illness, became statistically significant to determine the level of patients' satisfaction.. Those patients with low level of expectation were found less satisfied but all those with medium expectation have got the higher level of satisfaction (46.6 vs. 15.4%). The less satisfaction score for those patients with low expectation on information is probably because health care providers give little attention for effective communication and in some cases they have limited capacity to provide information about patient's illness (37).

The overall attitude of patients towards the health care was found statistically significant in determining the level of patient satisfaction. The study has shown that patients with fair attitude were found to have high satisfaction level (49.5%). This finding resembles with that of Asma I (Good attitude with 21.2% high satisfaction rate). The finding implies that the higher the attitude a patient had, the more likely the patient will be satisfied with the health care services provided by the hospitals (8).

As to this study 51.8% of patients were dissatisfied by the overall to waiting time to get the services..This is higher than the findings reported by Jimma University specialized hospital which showed 37.2% of patients have reported long waiting time. This higher dissatisfaction rate with waiting time could be attributed to decrease number of patients, .However the dissatisfaction rate with waiting time to receive the service in the study area is higher

compared to the waiting time to the study in the Tigray hospital where 43.2 dissatisfaction rate was reported (.3,5)

Quality of care is very important indicator in any health sector. Poor quality is costly; it leads to loss of lives, loss of time, and loss of public confidence. The best way of measuring the quality of health care is by direct asking the services users (8). Accordingly, among 290 patients 76 (49.1%) patients gave comments and suggestions to improve the quality of care. The comments and suggestion given are found smaller than that of IGMH, Male' Maldives (72.9%).

Most of the comments and suggestions in the current study areas focused on the physical environment of the hospitals. Specifically, the comments and suggestions given on cleanliness of the toilets and shortage of sitting chairs are the dominant one. In IGMH, in contrary, most of the comments and suggestions focused on convenience (133). The next higher rate of comments and suggestions was given on courtesy (26) followed by convenience (19), out of pocket cost (13), and quality of care (9). But that of IGMH, Male' Maldives the next higher rate of comments and suggestions was on the physical environment and courtesy (both 23) followed by out of pocket cost (13). Unlike the current study, in IGMH, there was no any comment or suggestion given on quality of care (7). This variation could be due to structural and economical difference between the two study areas.

Strength and Limitations of the Study

Strength of the study:

- The study is supplemented by patients' comments and suggestions which was very helpful to find out the problems thus it will help to find a way for improvement of the quality of hospital service.

Limitations of the study:

- Findings of this study might suffer from response bias due to the fact that facility based studies produce more positive responses by the patient.
- The study has limitation in collecting information about patients' health status during interview; it does not assess the association between individual's health status and level of satisfaction.

Chapter Eight Conclusion and Recommendations

8.1. Conclusion

In conclusion, in this study the overall satisfaction rate was found to be lower as compared to many other previous studies in the country and out of the country. The lowest level of satisfaction was on courtesy. Factors related to satisfaction include patients' expectation towards waiting time, overall attitude, and expectation on information. Patients' overall attitude towards the health service has a direct relationship with satisfaction, i.e., patients with poor attitude have got low level of satisfaction. Expectation of patients on the information they got about their illness directly affects the level of satisfaction. The higher their expectation, the higher will be their level of satisfaction.

Patients' expectation towards waiting time is one of the factors that determine the satisfaction level of patients where patients with low level of expectation were found to be less satisfied as compared to those patients with medium level. The physical environment is one of the major areas that have effect on quality of health care service.

8.2. Recommendations

- The hospital management needs to act on staff courteousness and politeness to increase the level of satisfaction.
- The hospital management should work on increasing the quality of health care.
- The hospital management should improve the physical environment of the hospitals to increase the quality of health care service.
- Health care providers should give adequate information to the patients about their illness.
- The hospital management should improve the waiting time of the hospital to increase patient's satisfaction.

References

1. Anjum J. Patient satisfaction towards outpatient department services Pakistan institute of medical sciences, Islamabad (MPHM thesis in primary health care management). Nihon Pathom: Faculty of graduate studies, Mahidol University, 2005
2. Berehanu Z. Assefa T. Woldie M. et al. Determinates of satisfaction with health care providers' interaction of health centers in central Ethiopia BMC Health service research 2010 10;78. <http://www.biomedcentral.com/1472-6963/> accessed may 20/2013.
3. Adane G. Assessment of client satisfaction without patent service. (2006) Addis Ababa
4. Mitike G. Mekonnen A, Osman M et al. satisfaction on out patient service in hospitals' of the Amhara region; *Ethiop Med* 2002, 40(4) ; 387 – 96;
5. Fekadu A. Andualem M. Yohannes H. Assessment of Clients' Satisfaction with Health service Deliveries at Jimma University Specialized Hospital. *Ethiop J Health Sci.* July 2011, (21) 2,
6. Neil J. Mackinnon striving beyond patent satisfaction a road map for pharmacist, *Intec* 2005, 9(9).
7. Bekele A, Girum T, Yared M et al. Levels of outpatient satisfaction at selected health facilities in six regions of Ethiopia. *ethiop jurnal of health Dev* 2004 ; 22(1);42-48;
8. Ibrahim A. Patent satisfaction with health service at outpatient department. Male' Maldives University; *March 13, 2008*.
9. Szyca R. Bosick A. Nowakowska U. Lekswsk K. Analysis of factor influencing patent satisfactions 2012: 84 (3)136-143;
10. Ashrafun L. Jasimuddin M. factor determining in patent satisfaction with hospital care. Banglادish. *Asian social science*, *January 2011*, 7(6)
11. Tateke T. Woldie M. Ololo S. determinates of patent satisfaction with outpatient health service at public and private hospital in Addis Ababa , Ethiopia , *Afr J, prm health carefarm Med* 2012, 4 (1).
12. David H. Poverty and access to health care in developing countries, *Annals of the New York Academy of Sciences*, 2008, 1136: 161-71;
13. Gill L. White L. A critical review of patent satisfactions university of Sydney Australia. 2009, 22(1) 8-19;
14. Mekonon A. Tkelamariam Z. kedir H .etal. Patient satisfaction with laboratory service in selected government hospital eastern Ethiopia, 1 (3).

15. Aiken L H. Patient safety, satisfaction, and quality of hospitals care; cross sectional surveys of nurses and patients in 12 countries in Europe and the United States, 2012; 344; e1717. *BMJ* 2012:344 doi:[http://dx.doi.org/10.1136/ 20 March 2012](http://dx.doi.org/10.1136/20_March_2012)
16. Getent H, Hailemichael A, Tegegn A, et al. Client satisfaction with anti retroviral therapy service at Jimma University specialized hospitals, *Ethio. J, July 2008*, 18.2
17. Debono J. travaglia compliments and patient satisfactions a comprehensive review of the literature 2009.
18. Beyene W. Jira C. Sudhakar M. Assessment of Quality of Health Care in Jimma Zone, Southwest Ethiopia. *Ethiop J Health Sci. 2011 August; (21): 49–58;*
19. Reftopoulos V. MBA R. grounded theory for patients' satisfaction with quality of hospital care Hellenic center for infectious disease controls Athenes Greece *Icunurs WEBJ [issue22] April June 2005.*
20. Newman RD, Gloyd S, Nyangezi JM et al. Satisfaction with outpatient health care services in Manica Province, Mozambique. *Health policy and planning. 1998;13(2):174-80;.*
21. Mezimer.R. Patient satisfaction and associated factors at outpatient department in Debrebirhan referral hospital, North Shoa Ethiopia, June 13, 2013. Un published.
22. Abadosh B. the quality of hospital service in eastern Ethiopia; patient's perspective. *Ethiop. J Health Dev. 2006. 20(3):199-200;*
23. Al- Eisa, Al. Mutar MS. Radwan MM. etal. Patients' satisfaction with primary health care Service at capital health Region, Kuwait, *Middle east Journal of Family Medicine, 2005*
24. Amare D. Levels of outpatient satisfaction at selected health facilities in six regions of Ethiopia, *Ethiop.J.Health Dev. 2008; 22(1):42-48;*
25. Ahemed J. Din SU. Patient satisfaction from the health care service, *journal of medical science January - June 2010 8(11).*
26. Access to affordable essential medicine
<http://www.who.int/medicines/mdg/MDG08chapteremedsEn>.
27. Soleimanpour H. Emergency department patient satisfaction survey in Imam Reza hospital, Tabriz, Iran 2011, 4 [1].
28. Zewedneh D. W/micheal K. Kebede S. communication skills of physicians during patient interaction at Tikure anbessa specialized teaching hospital Addis Ababa Ethiopia, 2009.

29. Ann Kutney-Lee. Matthew D. McHugh et al. Nursing: A Key to Patient Satisfaction. The national CAHPS survey and the American Hospital Association (AHA) Annual Survey, 2010, 28(4): 669–77;
30. Zinelidine M. the quality of health care and patient satisfaction: an exploratory investigation of the 5Qs model at some Egyptian and Jordanian medical clinics. Internatinal Journal of health care quality assurance incorporating leader ship in health services. 2006; 19(1): 60 – 92;
31. Hasan A. patient satisfactions towards child and maternal health service among mothers Dahaka Training institute of Bangladeshi 2007.
32. Addisu A. The determinants of patient satisfaction with health care services in Gondar: Case Study of University of Gondar Teaching Hospital, April 2013 (*Un published*)
33. Pauline W. Chen, on medical care, The New York Times Health/ Science, April 12, 2012
34. Ndifreke E. U. Patient-related factors influencing satisfaction in the patient-doctor encounters at the general outpatient clinic of the university of Calabar Teaching Hospital, Calabar, Nigeria, *International Journal of Family Medicine*, 19 March 2012
35. Avis M. Sara N. Ozatin E (1997). Questioning Patient Satisfaction: An Empirical Investigation in two Outpatient Clinics. *Social Science and Medicine*; 44 (1): 85-92;
36. Petiler J. Dahal A. The relationship between employee satisfaction and hospital patient experience north western university, April 2009
37. Jitta J.Wani J. Muyinde H. study of client satisfaction with health service in Uganda mekerare university medical science, 30 October 2008:42-44

Annexes

Annex 1 English Version of the Questionnaire

Jimma University

College of Public Health and Medical Sciences

Department of Health Service Management

Questionnaire for data collection on ‘Assessment of Patient Satisfactions at the Outpatient Department’ in two district hospitals

- Name of hospital-----
- Code-----

Verbal consent form before conducting interview

Greeting

Hello! My name is ----- . I am conducting a research on Assessment of Patient Satisfaction. I would like to ask you few questions about the outpatient health service of this hospital. The objective of the study is to assess patient satisfaction in the outpatient department of the hospital and to identify those associated factors that affecting the satisfaction. This will be important to improve the health service delivery of the hospitals. Your cooperation and willingness for responding the questionnaire is very helpful in identifying the problems related to the issue. Your name will not be written in the form and I assure you that all the information you give will be strictly confidential. Your participation is voluntary and you are not obliged to answer any question you do not wish to answer. If you are not still comfortable with the interview, please feel free to stop at any time you like. Do I have your permission to continue?

1. If yes, continue to the next page
2. In no, skip to the next respondent

Data collector’s name and code ----- Signature-----

Date of data collection ----- Time started ----- Time finished -----

Supervisor’s name ----- Signature -----

I thank you for your cooperation.

Part 1: Socio-Demographic Factors

Please mark (√) to the appropriate answer in the box or fill in the blanks as required.

1. Sex:
 1. Male
 2. Female
2. Religion:
 1. Orthodox
 2. Muslim
 3. Protestant
 4. Other specify-----
3. Age (in years):-----
4. Address:-----
 1. Urban
 2. Rural
5. Marital status:
 1. Single
 2. Married
 3. Divorced
 4. Widow/widower
6. Level of education:
 1. Cannot read & write
 2. Can read & write
 3. Primary school
 4. Secondary school
 5. College (University)
7. Occupation:
 1. Government employeeR
 2. Private employee
 3. Student
 4. Self employed
 5. Farmer
 6. Other (Please specify)

8. How often did you visit this hospital during the last six months?

1. Once
2. More than once

9. How are you going to pay for this visit?

1. Private scheme
2. Government scheme
3. Insurance scheme
4. Free
5. Other (Please specify) -----

Part 2: Patient expectation towards health service at OPD of Boru Meda and Hidar 11 district hospitals

10. What was your expectation to the total cost paid out of your pocket for health service (e.g. payment for registration, laboratory, and medication)?

1. I expect that the total cost out of pocket might not be affordable.
2. I expect that the cost out pocket might be affordable.
3. I expect that total cost out of pocket might be enough to cover this visit.
4. I don't have any expectation

11. What is your expectation towards the quality of care (e.g. quality of equipment, service providers, and medication)?

1. I expect that the quality of care will not good.
2. I expect that the quality of care will be acceptable.
3. I expect that the quality of care will be excellent.
4. I don't have any expectation.

12. What is your expectation towards waiting time?

1. I expect that the waiting time will be long.
2. I expect that the waiting time will be acceptable.
3. I expect that the waiting time will be short.
4. I don't have any expectation

13. What is your expectation towards the surrounding of hospital (e.g. cleanness, ventilation, health message)?

1. I expect that the condition of the OPD surrounding might not be good.
2. I expect that the condition of the OPD surrounding might be acceptable.
3. I expect that the condition of the OPD surrounding might be excellent.
4. I don't have any expectation

14. What is your expectation about the information that you would get from the doctor concerning your illness?

1. I expect that any useful information might not be obtained.
2. I expect that some useful information might be obtained.
3. I expect that a lot of useful information might be obtained.
4. I don't have any expectation

Part 3: Patients' attitude towards health service at the OPD of Boru Meda and Hidar 11 district hospitals:

- How do you feel about the health service you have received from the OPD?

Please read each one carefully and place a right mark (√) in the appropriate boxes that expresses your feeling using the following indicators.

1. **Strongly disagree**
2. **Disagree**
3. **Uncertain**
4. **Agree**
5. **Strongly agree**

S.N.	Patients' Attitude	1	2	3	4	5
15	The queuing system is trouble free.					
16	The doctors are competent.					
17	The doctors are business-oriented and impersonal.					
18	The medical staffs treat you in a friendly courteous manner.					
19	The overall health care service that you get from this hospital is good.					

Part 4: Satisfactions towards health services at OPD:

Please read each one carefully and place a right mark (√) in the appropriate boxes that expresses your satisfaction using the following indicators.

1. Strongly disagree
2. Disagree
3. Neutral
4. Agree
5. Strongly disagree

Q.N	Convenient	1	2	3	4	5
20	How satisfied are you The service system is simple and trouble free?					
21	How much are you satisfied with Medical instruments like BP apparatus, thermometer, weighing scale and others are available?					
22	How much are you satisfied with Nurses available for counseling?					
23	How satisfied are you with The arrangement of waiting area for patients are good.					
24	Doctors are available for consultation.					
Courtesy						
25	The medical staffs treat friendly and in courteous manner.					
26	Doctors and nurses are attentive while listening & answering your questions.					
27	The service providers give appropriate time for medical evaluation.					
28	Service providers keep your privacy before doing any procedure.					

Perceived quality of care					
29	Health care providers are competent for treating patients.				
30	The quality of instruments used for medical care is good.				
31	Doctors examine patients carefully.				
Out of pocket cost					
32	Cost of medical services are affordable				
Physical Environment					
33	The environment of the OPD is clean and tidy.				
34	Seating chairs are available at the waiting area.				
35	Pure water is available and the toilets are clean.				
36	There are clear signs and directions to indicate where to go and; they are easy to follow.				

Part 5: Patients' suggestion and comments to improve the quality of health services at the OPD of Boru Meda and Hidar 11 hospitals:

37-----

Thank you very much for your kind cooperation!

Annex 2 Amharic Version of the Questionnaire

ጅማዩን ቨርስቲ የህብረተሰብ ጤና እና የህክምና ፋካሊቲ

ለተሳታፊዎች የሚገር አጭር መረጃ

ትወወቅ

በመግቢያዎ ሆስፒታል በተመለሰህ ህክምና ክፍል ለሚታከሙ ህመማችን የተዘጋጀ የህመምተኛ እርካታ መጠይቅ፤

- የሆስፒታሉ ስም _____
- የአገልግሎት ክፍል _____
- ወረዳ _____
- የጥያቄው ኮድ-----

ህመማችን በጥናቱ ለመሳተፍ ፈቃደኝነታችንን የሚገልጹበት ፎርም፤

እንደምን ሰነበቱ?

ስሜ_____ ይባላል፡፡ ጅማዩን ቨርስቲ በሜረገው በዚህ ጥናት ወስጥ ተሳታፊ ስሆን እርስዎ በዚህ ሆስፒታል ተመለሰህ ህክምና ክፍል ወስጥ በሚታከሙት ወቅት ከሆስፒታሉ ስላገኙት የጤና አገልግሎት እንክብካቤ ቃለ መጠይቅ አደርግለዎታለሁ፡፡ የዚህ ጥናት አላማ ህመማችን ከሆስፒታሉ ተመለሰህ ህክምና ክፍል እያገኙ ባሉት አገልግሎት ላይ ጥናት በሚደረግ ያለውን ክፍተት ለማሳየት ነው፡፡ ለአላማው መሳካት የእርስዎን ትብብር እንሻለን፡፡ የእርስዎ ስምም ሆነ አድራሻ በመጠየቁ ወስጥ አይካተትም፤ እንዲሁም የእርስዎ ስምምነት ሆነ የሰጠች ምላሽ የእርስዎ ስለመሆኑ በምንም ሁኔታ አይገለጽም፡፡ ቃለ መጠይቁ ከ20---25 ደቂቃ የሚወስድ ሲሆን በዚህ ጥናት ለመሳተፍ የእርስዎን መላ ፈቃደኝነት ስንጠይቅ ያለምንም አስገዳጅነት ሲሆን፤ ፈቃደኛ ካልሆኑ ከመጀመሪያው ሆነ ቃለ መጠይቁን ከጀመሩ በኋላ ከመላ ልላይ ማቆረጥ ይችላሉ፡፡

በጥናቱ ለመሳተፍ ፈቃደኛ ነዎት?

አዎ_____

አይደለሁም_____

1. ፈቃደኛ መሆናቸውን ካረጋገጡ በኋላ መጠይቁን መመላት ይጀምሩ፡፡
2. ፈቃደኛ ካልሆኑ ወደ ማቅጠል ውህመምተኛ ይቀጥሉ፡፡

መረጃውን የሀብ ስበ ውስጥ _____

ፊርማ _____

ሚጃውየ ተሰባስቦ ትቀን _____

የተጀመረበት ሰአት _____

ያለቀበት ሰአት _____

የተቆጣጠረው ስም _____

ፊርማ _____

መጠይቁ ወስጥ ስላሉት ጥያቄዎች በተመለከተ፤

በዚህ መጠይቅ ወስጥ ያሉት ጥያቄዎች እርስዎ በሆስፒታሉ ወስጥ በተመለከተ ስላሉት ጥያቄዎች ላይ እያሉ ከሆስፒታሉ ስለገኙት እንክብካቤ ያሉትን ግንዛቤና አስተያየት የሚጠይቁ ናቸው፡፡ እያንዳንዳን ጥያቄ በጥንቃቄና በታማኝነት ይንገሩ፡፡ መጀመሪያ ላይ የሚከተሉት አስተያየት የተሻለ ስለሚሆን ለእያንዳንዱ ጥያቄ በጣም እረጅም ጊዜ አይወሰዱ፡፡ ከጥያቄዎቹ መካከል ለአንዱ ምላሽ ለመስጠት የተቸገሩ ከሆነ ይበልጥ ከእርስዎ አስተያየት ጋር ተቀራራቢ የሆነ ወን አንዱን ብቻ በመሥረጥ ተጨማሪ ሃሳብ ካለዎት ከጥያቄው ጎን ያስፍሩ፡፡ የእርስዎ ስምም ሆነ አድረሻ በመጠይቁ ወስጥ አይካተትም፡፡ የሰጠው አስተያየት የእርስዎ ስለመሆኑ በምንም አይነት ሁኔታ አይገለጽም፡፡

ክፍል 1 እርስዎን በተመለከተ መጠይቅ፤

የሚከተሉት ጥያቄዎች ስለ እርስዎ ማንነት የሚጠይቁ ናቸው፡፡ የሚከተሉት ምላሾች ለጥናታችን የሚረዱ ይሆናሉ፡፡

ለእያንዳንዱ ጥያቄ ምላሽ ለመስጠት የተቸገሩ ከሆነ ይበልጥ ተቀራራቢ ይሆናል ያሉትን በመመለስ ተጨማሪ ሃሳብ ካለዎት በጥያቄው ጎን ተጨማሪ ሀሳብዎን ያስፍሩ፡፡

1. ያታ
 1. ወንድ
 2. ሴት
2. አድራሻ
 1. ገጠር
 2. ከተማ
3. ሀይማኖት
 1. ኦርቶዶክስ
 2. መስሊም
 3. ፕሮቴስታንት

4. ካቶሊክ
5. ሌላ ካለ ይጥቀሱ-----

4. እድሜ _____

5. የጋብቻ ሁኔታ
 1. ያገባ /ች
 2. ያላገባ /ች
 3. አግብቶ የፈታ/የ ፈታች/
 4. በጥገና የተለያዩ

6. የትምህርት ሁኔታ
 1. ማንበብና መጻፍ የማይችል/ የማትችል
 2. ማንበብና መጻፍ የማይችል/የምትችል
 3. መጀመሪያ ደረጃ ት/ት
 4. ሀሰተኛ ደረጃ ት/ት
 5. ኮሌጅ/ዩኒቨርሲቲ

7. የስራ ሁኔታ
 1. የመንግስት ሠራተኛ
 2. የግል ድርጅት ሰራተኛ
 3. ተማሪ
 4. በራሱ የማይቀላቀስ
 5. ስራ አጥ
 6. ግብርና
 7. ሌላ ካለ ይጥቀሱ-----

8. ባለፉት ስድስት ወራት ጊዜ ውስጥ በዚህ ሆስፒታል ስንት ጊዜ የህክምና አገልግሎት አግኝተዋል?

1. አንድ ጊዜ
2. ከአንድ ጊዜ በላይ

9. ለሚከተሉት የህክምና አገልግሎት የክፍያ ሁኔታ፤

3. በመንግስት (የዳቤ ህክምና)
4. በግል
5. በኢንሹራንስ
6. ነጻ ሕክምና
7. ሌላ ካለ ይጥቀሱ-----

ክፍል 2

10. በሆስፒታሉ የተመላላሽ ህክምና አገልግሎት አሰጣጥ ክፍያ ላይ የጠበቁት ነገር ምን ነበር? /ምሳሌ ለምዘገባ ለተጨማሪ ምርመራ ለላብራቶሪ ፣ ለራጅና ለመድሀኒት /

1. ለሆስፒታል አገልግሎት የሚከፈለው ዋጋ በጣም ወድነው።
2. ለሆስፒታል አገልግሎት የሚከፈለው ዋጋ ተመጣጣኝ ነው።
3. ለሆስፒታል አገልግሎት የሚከፈለው ዋጋ በአቅም ልክ ነው።
4. የጠበቀው ነገር የለም።

11. በሆስፒታሉ ወስጥ ስላለው የአገልግሎት አሰጣጥ ጥራት ግምት ወ ምን ነበር /ለምሳሌ የህክምና መሳሪያዎች ጥራት፣ የባለሙያዎች አገልግሎት አሰጣጥ ጥራት፣ የመድሀኒት አቅርቦት/

1. የአገልግሎት አሰጣጥ ጥራቱ ጥሩ እንደሚሆን እገምት ነበር።
2. የአገልግሎት አሰጣጥ ጥራቱ መካከለኛ እንደሚሆን ግምገማታዬ ነበረኝ።
3. የህክምና አገልግሎቱ ጥሩና የተሟላ እንደሚሆን ግምገማታዬ ነበረኝ።
4. ምንም አይነት ግምገማታዬ አልነበረኝም።

12. በሆስፒታሉ አገልግሎት አሰጣጥ ላይ ደንበኞች በሆስፒታሉ ወስጥ ስለሚኖራቸው የቆይታ ግዜ ምን ግምገማታዬ ነበረዎት?

1. የቆይታ ጊዜው ረጅም እንደሚሆን ገምግማታዬ ሆኗል።
2. የቆይታ ጊዜው ተመጣጣኝ እንደሚሆን ገምግማታዬ ሆኗል።
3. የቆይታ ጊዜው አጭር እንደሚሆን ገምግማታዬ ሆኗል።
4. ምንም አይነት ግምገማታዬ የለኝም።

13. በሆስፒታሉ ጠቅላላ ገጽታ ላይ ምን ግምገማታዬ ነበረዎት / በአካባቢ ጽዳት፣ በታወቀ ፋሻማ ስለመሆኑ፣ ስለ ሆስፒታሉ አገልግሎት መልእክት በሚከተሉት ስራዎች ላይ ስለተደረገው ግምገማታዬ ምን ነው?

5. የሆስፒታሉ አካባቢያዊ ሁኔታ ጥሩ እንደሚሆን ግምገማታዬ ነበረኝ።
6. የሆስፒታሉ አካባቢያዊ ገጽታ ተቀባይነትና ተስማሚ እንደሚሆን ግምገማታዬ ነበረኝ።
7. የሆስፒታሉ አካባቢያዊ ገጽታ ተቀባይነት ያለው ለአገልግሎት ምቹ እንደሚሆን ግምገማታዬ ነበረኝ።
8. ምንም አይነት ግምገማታዬ አልነበረኝም።

14. በሽታዎን አስመልክቶ በሀኪሞች ስለሚሰጡት የአገልግሎት አሰጣጥ መረጃ ላይ ምን ግምገማታዬ ነበረዎት?

8. ምንም አይነት ጠቃሚ መረጃ ይሰጠኛል ብዬ አላሰብኩም።
9. ወስን መረጃ እንደሚሰጠኝ ጠብቄ አለሁ።
10. በቂ መረጃ እንደሚገኝ ጠብቄ አለሁ።

11. ምንም ሃሳብ አልነበረኝም፡፡

ክፍል 3፤ በቦሩና ህዳር 11 ሆስፒታሎች ወስጥ ስላለው የተመላላሽ ህክምና አገልግሎት የህመምተኞች አመለካከት፤

• በተመላላሽ ክፍል በጣም ጥንቅቅ የህክምና አገልግሎት ላይ ያለው ህላብ እንዴት ነው? እባክዎ የሚከተለው ጥያቄ በጥሞና በመረዳት በተመላላሽ የህክምና አገልግሎት ላይ ያለውን አመለካከት (ዝንባሌ) በመለስ ይተባበሩን ፡፡ ለዚህም የሚከተሉትን ጠቋሚዎች ያንብቡ፡፡

1. በጣም አልስማምም
2. አልስማምም
3. እርግጠኛ አይደለሁም
4. እስማማለሁ
5. በጣም እስማማለሁ

ተ.ቁ	የህመምተኛው አመለካከት (ዝንባሌ)	1	2	3	4	5
15	ሆስፒታሉ ወረፋ (ሰልፍ) ችግር የለበትም፡፡					
16	ዶክተሮች ተወዳጅና ቅን ናቸው፡፡					
17	ዶክተሮች ለግል ጥቅማቸው ብቻ የሚሰሩ ናቸው፡፡					
18	የሆስፒታሉ መቆላቆሎች ጓዳዊ በሆነ መንገድ አገልግሎት ይሰጣሉ፡፡					
19	በተመላላሽ ክፍል የሚሰጠው አገልግሎቶች ጥሩ ናቸው፡፡					

ክፍል 4፤ በተመላላሽ ህክምና ክፍል ስለሚገኘው አጠቃላይ የህክምና የአገልግሎት ስላገኙት እርካታ

እባክዎ የሚከተለው ጥያቄ በጥሞና በመረዳት ያለውን የህክምና እርካታ ይግለጹልን ለዚህም የሚከተሉትን ጠቋሚዎች ይጠቁሙ፡፡

1. በጣም አልስማምም
2. 95% CI of [0.12-0.97] አልስማምም
3. እርግጠኛ አይደለሁም
4. እስማማለሁ
5. በጣም እስማማለሁ

ተ.ቁ	የአገልግሎት ምቹነት	1	2	3	4	5
20	የሆስፒታሉ የአገልግሎት አሰጣጥ ቀላልና ከችግር የጸዳ					

	ነው፡፡								
21	አስፈላጊ የሆኑና የህክምና መሳሪያዎች አቅርቦ ለምሳሌ የደምግፊት መሳኪያ፣ የመቅት መሳኪያ፣ የክብደት መሳኪያ እንዲሁም ሌሎች ይገኛሉ፡፡								
22	ለምክር አገልግሎት የተመደቡ ነርሶች በጊዜው ይገኛሉ፡፡								
23.	በበተኞቹ መቆያ ቦታ አዘገ ረክተዋል								
24	ለምክር አገልግሎት የተመደቡ ዶክተሮች በጊዜው ይገኛሉ፡፡								
25	የሆስፒታሉ የህክምና አሰጣጥ በአክብሮትና በወንድማዊ አቀራረብ ላይ የተመሰረተ ነው፡፡								
26	የህመሞችን ጥያቄ በመወሰን ደረጃ ያለው የዶክተሮችና የነርሶች ፈጣንነትና ንቁነት ጥሩ ነው፡፡								
27	አገልግሎት ሰጭ መዳተኞች ለህክምና እንዲሁም ለምርመራ በቂ ጊዜ ይሰጣሉ፡፡								
28.	ጠና መዳተኞች ለምርመራ በቂ ጊዜ ይሰጣሉ								
28.	አገልግሎት ሰጪዎች አንድምነገር የህክምና አገልግሎት ከመስጠታቸው በፊት የአንድን ሰው ደህንነትና ምቹት በአግባቡ ይጠበቃሉ፡፡								
	የአገልግሎት ጥራት፤								
29.	ህመሞችን ለማከም የጠፍባለመዳተኞች በቂ ችሎታ አላቸው፡፡								
30.	ለህምክና የሚገለግሉ መሳሪያዎች ጥራት አስተማማኝ ነው፡፡								
31.	ዶክተሮች ተገቢ በሆነ ሁኔታ ጊዜና ትኩረት ሰጥተው ይመረምራሉ፡፡								
የህክምና ክፍያ ሁኔታ፤									
32.	የህክምና አገልግሎት ክፍያ ተቀባይነት ያለው ነው፡፡								
የሆስፒታሉ አካባቢያዊ ገፅታ፤									
33.	የተመላላሽ ክፍል አጠቃላይ ገጽታ ንፅህና ፅዱ ነው፡፡								
34.	የመቀመጫውን በሮች በመቆያ ክፍሉ በበቂ ሁኔታ ይገኛሉ፡፡								
35.	የንጹህ ወሀና ንጹህ ሽንት ቤቶች አቅርቦት አስተማማኝ ነው፡፡								
36.	ግልጽ የሆኑና ለመከተል ቀላል የሆኑ አቅጣጫጠቋሚዎች								

ይገኛሉ፡፡					
--------	--	--	--	--	--

ክፍል 5፤ በቦሩ እና ህዳር 11 ሆስፒታሎች ያለውን የአገልግሎት ጥራት ለመዘጋጀት ከህመሞቻችን የተሰጡትን ተገዳሪዎቻችን፤

37. -----

ለቀና ትብብርዎ አልብ እና መስግናለን !

Annex 3 Map Showing the Study Areas

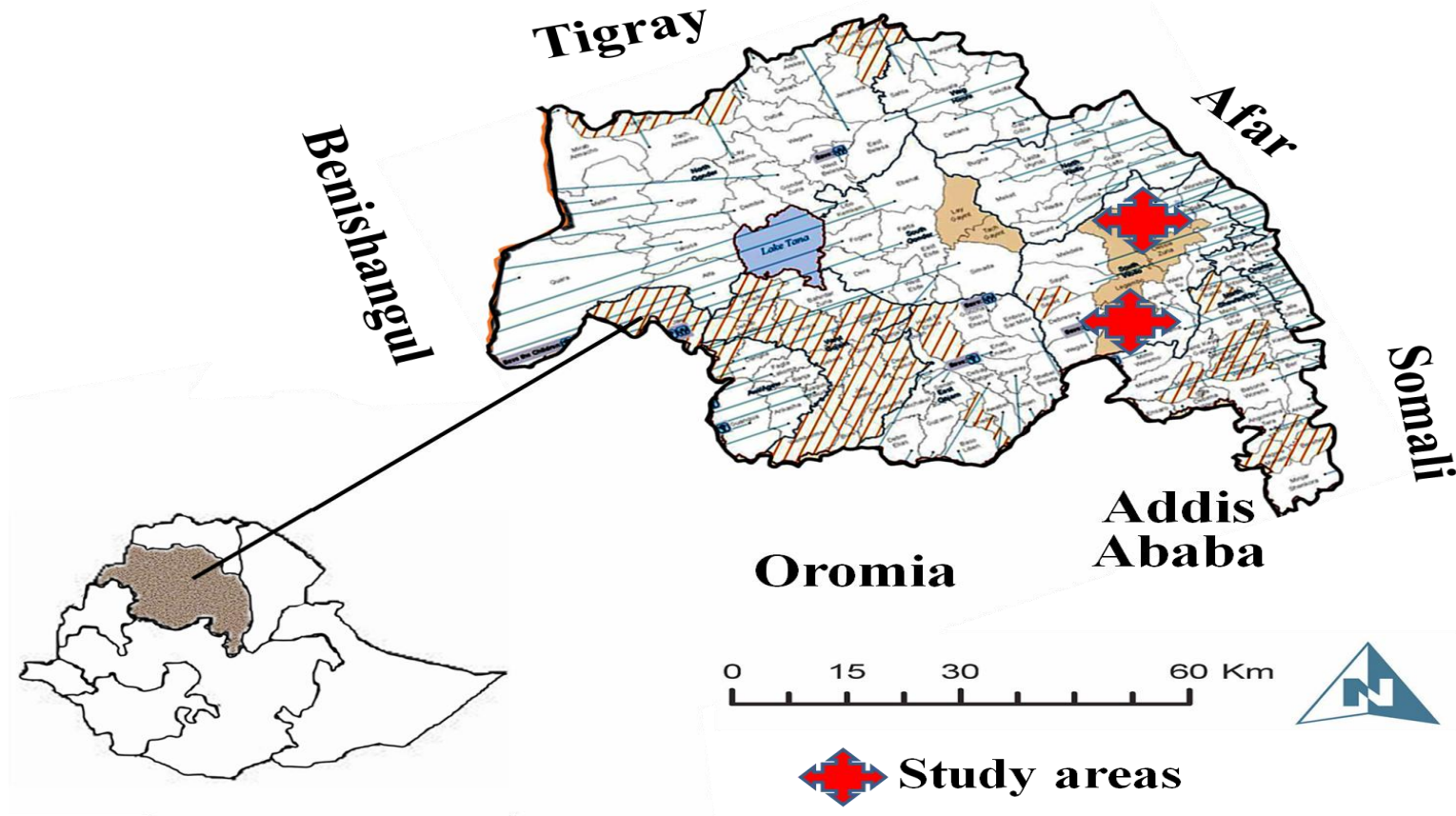


Figure 5. Map showing the study areas (Source: OCHA, February 2013)

Annex 4 Declaration

I, the undersigned, declare that this is my original work and has never been presented in this or any other university and that all the source material used for the thesis have been duly acknowledged.

Name of the Principal Investigator: Haile Seid

Signature _____

Date of submission _____

Place of submission: Department of Health Service Management, College of Public Health and Medical Sciences, University of Jimma

Approval of the Advisors: This thesis has been submitted for examination with my approval as a university advisor.

1. **Mr. Waju Beyene** (BSC, MPH, Assistant professor)

Signature _____

Date _____

2. **Ms. Berehane Megersa** (BSC, MPH)

Signature _____

Date _____

Overall satisfaction:

The study has shown that the overall rate of patients that were satisfied by the health care delivery system of the two hospitals was 48.3%.

Overall satisfaction:

The study has shown that the overall rate of patients that were satisfied by the health care delivery system of the two hospitals was 48.3%.