

**Assessment of Clients Satisfaction**  
**with Outpatient Services**  
**in**  
**Tigray Zonal Hospitals**

by

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A Thesis Submitted to the School of Graduate Studies of  
Addis Ababa University in Partial Fulfillment of the  
Requirements for the Degree of Master of Public Health

*July 2006 Addis Ababa*

## DECLARATION

I, the under signed, 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.

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This thesis has been submitted for examination with my approval as a university advisor

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## **DEDICATION**

This thesis is dedicated to my lovely wife

**Sister Belainesh Hagos**

## **ACKNOWLEDGEMENT**

I am very much indebted to my advisor Dr Getnet Mitike for his relevant advice, close follow up and guidance during all the work.

I am also very happy to thank Dr Gebreab Barnabas Head, Tigray Regional Health Bureau for his relevant advice during the selection of the research topic and for providing me important reference material.

My special thanks goes to Ato Araya Kahsu, Deputy Tigray Health Bureau head for his relevant advice and close follow up helpful for my study and his timely and keen decision to facilitate the financial and administrative supports.

My thanks also goes to the Department of Community Health, Faculty of Medicine, Addis Ababa University for all the efforts to provide me with the necessary knowledge and skill to conduct the study.

I am also very happy to thank to Ato Haimemariam Kasahun, head HMIS, Tigray Regional Health Bureau in providing me with all the necessary advice, information, and very important reference materials and for his unreserved technical support in the computer skills.

My very great gratitude also goes to my wife sister Belainesh Hagos for her unlimited and encouraging moral, material and financial support through out the course years and the research work.

I am very glad to forward my special thanks to Ato Kidanemariam Hagos for his encouraging support both in moral and material and in the printing and binding process of my thesis document.

I also would like to happily appreciate and give very special thanks to the Tigray Regional Health Bureau for providing me all my financial expenses and administrative support to conduct the study in the region.

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## ABSTRACT

Most zonal hospitals in Tigray are among the oldest hospitals in the region, now serving for the huge population of the region that were originally established about 40 or more years ago for a much lesser population. Through time the significant increase in population growth has resulted in an extremely increased demand for health services, while the hospital capacity and facilities are not correspondingly changing. Different efforts are on process to fulfill the hospitals with the right manpower, medical equipment and other facilities to meet the needs of the clients. However the level of clients satisfaction is not known since no systematic study was carried out to assess the condition.

A cross sectional study was conducted from November to April 2006. A combination of methods was used in collecting data for this study. These were both the quantitative and qualitative techniques. Three zonal hospitals were included in the study by simple random sampling technique. A total of 422 respondents were recruited for the study selected by systematic random sampling technique in the zonal hospitals. Structured questionnaire was used to collect the data in the zonal hospitals. In addition, FGDs with the clients and In depth interviews with the key personnel of the selected hospitals were also conducted to gather information. Epi6 and SPSS 10.0 statistical packages were used for data management.

Among the clients, 52.6 % are male, 40.5% of the total clients are illiterates, 45.3% are from the rural areas and 33.6 % are non paying. The findings of the study showed that the client satisfaction level with the outpatient departments in the zonal hospitals was 43.6 %. Satisfaction

was rated highest with courtesy and respect by the health workers with 93.8 % satisfaction rate. Dissatisfaction was rated highest by respondents with the lack of drugs and supplies in the hospitals pharmacies with 64.9% reporting dissatisfaction. Nearly half of the respondents (46.7 %) responded they were not satisfied with the information provision by the health workers about the services and their health problems. 96 % of the clients got a prescription for drugs and supplies. Of those with the prescription paper, only one third (32 %) got all the prescribed drugs and supplies. 44.2 % of the respondents were dissatisfied with the overall waiting time to get the hospital services.

In conclusion, many clients were found to be dissatisfied with the services of the outpatient departments of the zonal hospitals. In addition the FGDs and In depth interviews showed that clients dissatisfaction was associated with the lack of drugs and supplies, long waiting time and inadequate information provision like that of the factors identified during the exit interview. Thus, the level of clients'

dissatisfaction is high. Therefore revising the allocation of budget for the hospitals to enable them keep the basic drugs and supplies and reassessment of the functions of the special pharmacies in the hospitals, Improving and strengthening the existing information provision to clients and developing a new hospital structure is recommended.

Key words: - Hospital, Out patient department, satisfaction

# 1 – BACKGROUND

Service is generally any activity undertaken to meet social needs. Public service particularly refers to those activities of government institutions aimed at satisfying the needs and ensuring the well being of the society as well as enforcing laws, regulations and directives of the government. Service delivery refers to the systematic arrangement of activities in service giving institutions with the aim of fulfilling the needs and expectations of service users and other stakeholders with optimum use of resources. In short improvement of service delivery means increasing the cost effectiveness, coverage and impact of services. (1)

In the prior years when hospitals were symbols of humanitarian efforts for community welfare, accountability for performance was of little concern. Today however people are increasingly concerned about hospital's performance because: -1) Hospitals use an increasing proportion of scarce community resources. 2) There are increasing questions about quality and effectiveness. (2). There is increasingly evidence that appropriately addressing consumer's health care leads to improved health care outcomes. Expectations about quality of care are linked to perceptions of care, and when patient's perceptions are positive their clinical experience and outcomes are more likely to be positive. (3).

Studies in Jimma hospital, Gondar hospital and the hospitals of the Amhara region showed low client satisfaction because of long waiting time and unavailability of basic drugs. (4, 5, 6). In Tigray region, the population is growing rapidly at an annual rate of about 3%, which in addition is accommodating many migrants from bordering places and drought affected areas. People come looking for jobs and shelter thus an increased number of people visit the health

institutions in the region, which are under staffed and less equipped. (7). Most zonal hospitals are among the oldest hospitals in the region now serving for the people of the region that were originally established about 40 or more years ago for a much lesser population.

Through time, the significant increase in population growth has resulted in an extremely increased demand for health services, while the hospital capacity and facilities are not correspondingly changing. Out of the total patients in the year 2004 (1996E, C) 1,972,237 about 879,322(44.6%) of them visited the zonal hospitals.(7).

The regional Health Bureau is therefore making different efforts that are still on process to fulfill the hospitals with the right manpower, medical equipment and other facilities to meet the needs of the clients. However although these efforts are undergoing to improve the service delivery, the needs of the people have not yet been adequately met. Thus, the level of client's satisfaction particularly with the hospital's outpatient services is not known, and there was no attempt so far. This study therefore would have an important input in assessing the level of clients' satisfaction on out patient health care services and identify the factors affecting the clients' satisfaction and provide a recommendation on an improved health service delivery that will be helpful to fill gaps which ultimately contributes to enhancing quality of outpatient services in hospitals of the region and improve the level of clients' satisfaction.

## **2 - LITERATURE REVIEW**

Hospitals are an important part of any health system. They provide-Curative care, Transfer knowledge, Work as referral for patients. To achieve service excellence, hospitals require continuous efforts to improve quality 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 consumers today are more aware of alternatives on offer and rising standards of service which increased their expectations. They are also becoming increasingly critical of the quality of service they experience (8).

To achieve service excellence, hospitals must strive for “zero defections,” retaining every customer that the company can profitably serve. “Zero defections” require continuous efforts to improve the quality of the service delivery system (8) Patients, the only reason for a hospital’s existence need services which are reasonably accessible and readily available at all times. Outpatient departments must commence treatment and have test and examination results made available properly. (9)

One aspect of health care quality that is being increasingly recognized for its importance is the influence of patient perception. Even though the patient’s perception of quality relies more on the service aspects of health care, it correlated well with objective measures of health care quality. A health care organization’s ability to satisfy consumer demand for convenience and information can significantly influence the quality of health care it ultimately delivers (3).

In the simplest terms, Total Quality Management advocates define quality as “Doing the right thing right, right away.” An essential factor to consider when analyzing the quality of care of a health facility is the perspective of the client. For clients and communities, quality care is something that meets their perceived needs. Since a client’s needs often differ, their personal satisfaction ultimately depends on the perception, attitude and expectations of each individual (10).

Thus, this decade has been substantial development of tools and methods for assessing health system performance and diagnosing the causes of problems and their potential remedies and according to Margaret Brawley, the most important dimensions of quality for the client are technical competence, interpersonal relations, accessibility and amenities (10).

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 consumers most readily appreciate, such as access, provider relationship, availability of information and opportunity for participation can influence health care quality outcomes (3).

A recent study in Bangladesh also found 40% vacancy rate for doctors posting in poor areas where people lacked access. (11) In line with this, James A willan stated “throughout the world are many people who receive adequate hospital care, some receive excessive care. Throughout the world also, are the many more without **access** to hospital care.”

Such people are dragging diseased, sick and injured bodies and minds wearily through a life of frustration and bitterness (9).

The quality of physician – patient relationships and interactions are themselves important in influencing health outcomes. Clear explanation of procedures by physicians and decision-making participation by patients has been shown to positively influence clinical outcomes (3). More over the attitudes and behavior of health professionals are known to have an important influence on patient care and quality of care (2). James A Wilan further stated, “Patients are not “a case” or the “fractured hip,” but persons entitled to respect and privacy,” Impersonal, Aloof efficiency and brusqueness of hospital staff is not acceptable. (9) Similarly providing patients with relevant and useful information is linked with increased patient compliance. A recent study surveyed 74 physicians and a sample of their patients in order to compare the importance of information delivery as an indicator of the quality. Provision of information was ranked 2nd in importance by patients but 6th by physicians (3).

Another study in Singapore hospitals showed that out of the total 300 respondents, 30(11.9%) rated the service quality verygood, 122 (48.4%) rated the service quality good, 70(31.0%) rated the service quality fair, 18(7.1%) rated the service quality poor and 4 (1.6%) rated the service quality very poor. The important findings in sequence were -

- Doctors should thoroughly explain medical conditions to patients.
- Doctors/staffs should treat patients with dignity and respect
- Doctors should possess a wide spectrum of knowledge
- Doctors/Staffs should be friendly and courteous. (8)

In Africa there is general agreement that hospitals especially public sector hospitals perform poorly. Other authors have noted that insufficient staffing and lack of supplies may impede the efficient delivery of health care to patients (12, 13).

Therefore, in low and middle-income countries alike, if services are available at all, 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. (11)

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, (14). An in-depth study of the Iringa district of Tanzania, a poor rural area, showed that patients bypassed low quality facilities infavour of those offering high quality consultation and prescriptions, staffed by more knowledgeable physicians and better stocked with basic supplies. (11). 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” They have their noses up in the air and neglect us” (11).

Another study in Mozambique on satisfaction with 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. (10). Many studies also show 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 (10).

In Ethiopia the backward socio-economic development resulting on one of the lowest standard of living, poor environmental conditions and low level of social services has been the major causes for a poor health status of the people. This situation has been aggravated in recent years by the high population growth and repeated natural disasters and civil wars together with the lack or inadequate infra-structures (16, 27).

Roughly, more than 50% of health facilities are in urban areas and over 30% of the health facilities need either major repair or replacement (16, 27). There were only 83 governmental hospitals in Ethiopia out of which 42 were zonal hospitals until up to 1995 E.C. Out of the total hospitals only 22(29%) were in good condition while 37(42%) need a major repair. (16, 27). Health professionals especially Medical doctors usually tend to heavily concentrate in urban areas, particularly in A. A resulting in a severe shortage of manpower in most hospitals outside A.A (16, 27)

A ratio of certain health workers in 1997 E.C for example is as follows (17, 26)

	Profession	Ratio/60 million Nationally	RatioTigray Region/ 4,223,014 million	WHO standard
1	Medical Doctors	1:29,777	1:95,651	1 : 10,000
2	Nurses	1:6,945	1:9935	1 : 5,000
3	Laboratory technicians	-	1:48,964	-

According to the report of the Ministry of Health, 1997(2004/2005), about 3.3 million out patient users, 40,639 inpatients, about 600,000 diagnostic services users and 20,800 major and

minor surgeries were served in the hospitals, showing that they are accommodating beyond their capacity (17).

A study in Jimma hospital showed 57.1% 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. (4). A similar study on outpatient performance of a teaching hospital in Gondar town showed 22.0% satisfaction rate (5). Another study on satisfaction on outpatient services in hospitals of the Amhara region showed that 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 (6).

Therefore, factors related to quality in relation to clients satisfaction like waiting time in the registration, examination rooms, laboratory procedures and availability of drugs and supplies in the hospital pharmacy, courtesy of the health professionals and provision of information by the health professionals are some of the factors that affect the satisfaction of clients. Having adequate information about these factors in the zonal hospitals is relevant in order to provide recommendations to improve the health service delivery and result in a better client satisfaction.

### **3 – OBJECTIVE**

#### **GENERAL OBJECTIVE**

To assess the level of clients' satisfaction with the services of out patient departments and factors affecting it in the zonal hospitals of Tigray region.

#### **SPECIFIC OBJECTIVES**

- To assess the level of clients' satisfaction with outpatient departments of zonal hospitals in Tigray region.
- To identify and describe the factors affecting the clients satisfaction in outpatient departments.

## **4 – METHODOLOGY**

**STUDY DESIGN:** - A cross sectional survey was conducted from January to February 2006 In this study both quantitative as well as qualitative methodologies are used. FGDs and Individual in depth interviews were conducted as part of the qualitative study.

**STUDY AREA:** - The study was conducted in Tigray region. Tigray is the north most national state of Ethiopia. It covers about 80.000 square Kms. It is around 780 Kms away from Addis Ababa. The region is bounded in the north by Eritrea, in the south by the Amhara region, in the east by the Afar region and in the west by Sudan. It has a total population of 4,112,993. It is divided into 5 administrative zones and one special zone (Mekelle zone) with a total of 47 weredas. The region has 5 zonal hospitals, 7 district hospitals, 38 health centers, 158 clinics and 263 health posts. Communicable diseases and nutritional problems are major health problems of the region and account for the majority of all health problems. Malaria, Tuberculosis, Acute respiratory infections, Diarrheal diseases and HIV/AIDS are among the top disease burdens.

### **SOURCE POPULATION**

All clients visiting the hospitals for outpatient health services from January 15 to February 2 including patients as well as other guardians/accompanyants were the source population.

### **STUDY POPULATION**

#### **QUANTITATIVE STUDY**

Clients coming to the outpatient departments during the study period selected using the systematic random sampling technique were the study population.

## QUALITATIVE STUDY

Clients who come to the outpatient departments of the hospitals were involved in the focus group discussion while the key personnel of each hospital were selected for the in depth interview. The participants were selected using a non-probability sampling technique, the purposive sampling technique.

## EXCLUSION CRITERIA

- Very seriously ill clients who did not have somebody to accompany them because of the difficulty of interviewing such cases (getting the consent, lack tolerance of the pain or illness and etc-)
- Children who are under 15 who are alone. This is because children below this age cannot provide information independently.

## SAMPLE SIZE DETERMINATION

Sample size(n) was determined based on the assumption of 50% prevalence (taken from a result in a study of the Amhara region hospitals of client's satisfaction with outpatient health services), Expected margin of error (d) of 0.05 and with 95% confidence level ( $Z_{\alpha/2}$ ) and 10% contingency for non-response. Thus

$$n = \frac{(Z_{\alpha/2})^2 * P (1 - P)}{d^2}, \quad n = \frac{(1.96)^2 * (0.5)^2}{(0.05)^2} \quad n = 384 + 38 = 422$$

- The sample size for each hospital was determined based on the number of clients served in each hospital. As a result, 422 clients were involved in the study.

## **SAMPLING PROCEDURE**

First the zonal hospitals were listed. According to a suggested rule of thumb by Aga Khan in sampling for quality of care, 50% of the hospitals (3 hospitals) were selected using a simple random sampling technique. Sample size was determined proportionately from each hospital and selection was performed randomly using systematic sampling technique. The size of the hospitals was determined by reviewing the annual document of each hospital for the number of clients visited them. Selection of the clients was by systematic random sampling technique. Every 5th client was selected just at the exit of the outpatient departments of the hospitals after receiving the health service in the OPD. Interviewing was conducted by first screening them before starting the actual interviewing. A non-probability sampling technique, the purposive sampling technique was used to interview the key informants in each hospital. 4 key informants from each hospital, a total of 12 key informants from the three selected zonal hospitals were involved in the interview.

## **DATA COLLECTION**

### **QUANTITATIVE STUDY**

Standardized and structured questionnaire was developed for the purpose of data collection after reviewing relevant literatures and assessing the Internet sources. The questionnaire in the beginning was prepared in English and then translated into Tigrigna and back to English to ensure consistency, but finally administered in Tigrigna, the local language. The questionnaire was designed to obtain information on socio demographic characteristics of respondents and their satisfaction level with the different components of the outpatient services which included

the availability of drugs and supplies, information provision by the health workers, waiting time to get the services, and courtesy and respect of the health workers. Three nurses were recruited for data collection. Data collectors and supervisors were trained for 2 days. After the training, the questionnaire was pre tested in a hospital that was not included in the actual study to ensure the quality and validity of data. Regular supervision, spot checking and reviewing the completed questionnaire was carried out by two health officers and the principal investigator daily to maintain data quality. The nurses recruited to collect data from the hospitals were from the nearby health centers or district health offices in order to minimize interviewer bias. Each data collector had completed an average of 13 questionnaires daily assigned, and hence the actual data collection took 17 days excluding the training and pretesting time.

### **QUALITATIVE STUDY**

The focus group discussion among the recruited clients was conducted in the same time period. Three Focus Group Discussions were carried out, one in each of the selected hospitals for the study. Each group had 8 participants which included both males and females from rural and urban areas. The principal investigator conducted the focus group discussions and the discussion of the participants was both audio taped and manually written by two other note takers. The focus group discussion within the different groups was carried out until it reached the saturation level.

The in depth interview was also carried out to interview the key personnel in each hospital. The key personnel, the hospital medical directors and or the administrators, the matrons, the pharmacy heads, and the laboratory heads were involved in the in depth interview. The principal investigator conducted the in depth interview using a simple checklist of topics/questions to be

covered to collect the suggestions of the participants. The points were manually written by both the principal; investigator and one other note taker. For both the FGDS and In depth Interviews the questions were similarly translated into the local language, Tigrigna like that of the standardized and structured questionnaire.

## **VARIABLES**

### **DEPENDANT VARIABLE:**

- Degree of client satisfaction (outcome)

### **INDEPENDENT VARIABLES -**

- Socio economic factors like Age, Sex, Marital Status, Educational status, Occupation
- Waiting time to get hospital's out patient services.
- Payment status – Free / Paying
- Distance, availability of drugs and supplies
- Doctor/patient relationship (Courtesy and respect )

The hospital's services include the registration room, examination room, laboratory and radiology investigation, prescription of drugs and supplies (pharmacy)

## **DATA QUALITY ASSURANCE**

The quality of data was ensured through training of data collectors, close supervision and immediate feedback, reviewing each of completed questionnaire daily. Daily information exchange including by telephone was a means used to correct problems during the course of the data collection. Consent for the survey was obtained and confidentiality was assured to improve the quality of data. Data consistency and completeness were made through out the data collection, data entry and analysis.

## **DATA ANALYSIS**

EPI Info version 6.0 and SPSS version 10.0 statistical package were used for data management. The principal investigator performed data entry and cleaning. 10% of the questionnaire was also cross checked with the already entered data to maintain its validity. Frequency distribution, percentages and Chi squared ( $\chi^2$ ) test to detect associations at 5% level of significance for selected variables were calculated as appropriate. Multiple logistic regression was also used to control confounders. The qualitative data was also transcribed manually from the audiotaped records and the notes taken. Results were analyzed manually written by summarizing the ideas forwarded by the participants.

## **SIGNIFICANCE OF THE STUDY**

The findings of the study may in general help the health management at a higher level and in particular those looking after the health institutions in the region to understand the extent of the problem in the hospitals and other similar health institutions. 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 in the knowledge and awareness of the problem areas by concerned bodies including the hospital staffs. In addition, the paper may be useful to other researchers as reference material while conducting further studies on similar problems.

## **DESCRIPTION OF FACILITIES AT SITES OF PERFORMANCE**

The study area was the Tigray Region where the zonal hospitals are found that are directly responsible to the Regional Health Bureau. Computers, offices and other materials are available in the bureau that are important for the development of questionnaire, data entry and analysis.

An Internet service was also available in the bureau. Nurses for data collection were also available in the different nearby health centers and woreda health offices that are under the regional health bureau.

### **ETHICAL CONSIDERATION**

The ethical approval and clearance for the study before data collection was obtained from the AAU, Medical Faculty. An official letter from the Regional Health Bureau was obtained to the hospitals and verbal consent from the Medical directors, Matrons and Head nurses was obtained too. Informed consent was also obtained from the clients after the purpose of the study was explained to the clients. To ensure privacy and confidentiality the exit interview was conducted where questions and answers cannot be overheard. They were also informed that the information obtained from them would not be disclosed to the third person /body. Name and other identifying information were not used in the study.

### **DISSEMINATION OF FINDINGS**

The findings of this study will be disseminated to the Federal MOH, Tigray Regional Health Bureau, all hospitals and all Woreda Health Offices. The findings will also be disseminated to different organizations that will have a contribution to improve the health service delivery in the hospitals of the region. Findings will also be presented in different seminars and workshops by arranging a programme with the regional health bureau. It may also be published in a scientific journal.

# RESULTS

## SOCIO DEMOGRAPHIC CHARACTERISTICS

There were 422 clients enrolled in the study. They have traveled an average (mean) of 2.02 hours of walking distance with a range of 1 to 4 hours. Out of the total 222(52.6 %) were males, Most of the Clients (28%) were between 25 – 34 years old. One hundred and seventy one (40.5%) were illiterates and the remaining could at least read and write. Regarding their marital status, one hundred and fifteen (27.3%) were unmarried, two hundred and sixty six (63%) married and the rest divorced and widowed. Most of the clients, one hundred fifty nine (37.7%) were farmers while forty one (9.7%) governmental employees, thirty (7.1%) merchants and the others unemployed and housewives. Two hundred thirty one (54.7%) of the clients came from the Urban areas of the zones. Out of the total respondents, 61.8% were new visitors and 90.5% came because of illnesses. Three hundred and five (72.3 %) were clients themselves and the rest were close family members and others. Nearly one third of the clients (33.6%) were non paying and received the services for free.(Table 1 shows the socio demographic distribution of the clients)

Table – 1. Socio Demographic Characteristics of the clients in the outpatient departments of three hospitals, Tigray Region, February 2006(n = 422)

Characteristics	Number	Percent
<b>Sex</b>		
Male	222	52.6
Female	200	47.4
<b>Age (in years)</b>		
15 - 24	105	24.9
25 - 34	118	28
35 – 44	99	23.5
≥45	100	23.7
<b>Educational status</b>		
Illiterate	171	40.5
1 – 6(primary)	111	26.3
7 – 12 (secondary)	112	26.5
Diploma and above	28	6.6
<b>Address</b>		
Urban	231	54.7
Rural	191	45.3
<b>Payment status</b>		
Paying	280	66.4
Free	142	33.6
<b>Type of individual</b>		
Patient	305	72.3
F. P and Vaccination clients	31	7.3
Family members	86	20.4
<b>Frequency of visit</b>		
New	261	61.8
Repeat	161	38.2

Courtesy and respect of health care provider was the aspect where satisfaction was rated highest 396(93.8%). Dissatisfaction was reported highest by respondents with the lack of drugs and supplies in the hospitals' pharmacies with 274 (64.9%) reporting dissatisfaction. Access and Cleanliness of the hospitals latrines were the other aspects where satisfaction level was less compared to the other aspects. (Table 2 shows the rates of satisfaction for the different components in the outpatient departments of the hospitals).

Nearly half of the respondents (46.7%) responded they were not satisfied with the information provision about the hospital services and the flow. 43.4% of the respondents reported laboratory, x– ray/ultrasound examinations were ordered to them while 96 % of the total clients got a prescription paper for drugs and supplies. Of those with prescription, 32%, 41.7%, and 22.5% got all the prescribed drugs, only some and none respectively. Over one third (44.2%) of the respondents reported dissatisfaction with the overall waiting time to get the hospital services, while 64.9% of the clients were dissatisfied with the lack of drugs and supplies in the hospitals.

Table 2. Level of satisfaction of clients with the different components in the outpatient departments of the zonal hospitals in Tigray, 2006.(n = 422 )

Characteristics	V.sat	Sat.	Neut.	Dissat	V.dissat
Information provision by health workers	14%	39.3%	4.3%	41.7%	0.7%
Time spent to see a Dr	26.5%	60%	0.9%	11.6%	0.9%
Courtesy and respect	28.2%	65.65	0.9%	4.5%	0.7%
Privacy	13.7%	52.1%	16.6%	17.5%	-
Access to latrines	4%	41.2%	20.1%	28.2%	6.4%
Cleanliness of latrines	1.9%	34.4%	18%	39.1%	6.6 %
Overall waiting time To get the services	4.7%	51.2%	6.95	36 %	1.2 %
Availability of drugs	8.1%	23.2%	4.7%	54.7 %	5.5 %
Overall level of satisfaction	5 %	38.6 %	7.3 %	48.1 %	0.9 %

v.sat = very satisfied      sat = satisfied      neut = neutral      dissat = dissatisfied  
v.dissat = very dissatisfied

Tables 3 – 7 show the comparison of selected socio demographic characteristics (factors) with overall level of satisfaction, availability of drugs and supplies, information provision by health workers and overall waiting time to get the outpatient services. Comparisons were made for those who were satisfied versus dissatisfied in relation to each variable of interest.

Table 3 and 4 compares selected socio demographic characteristics and the overall level of satisfaction. Respondents who have tertiary education (diploma and above) and the governmental employees were more satisfied as compared to the illiterates and farmers respectively. But these differences were not statistically significant. Other socio demographic characteristic like sex was not associated with client satisfaction. Statistically significant difference was observed for address where clients from the rural areas were less satisfied as compared to those from the urban areas ( $p=0.003$ ). Degree of satisfaction was also different in those patients who responded by themselves from those who responded through their family members. Those patients who responded by themselves were more dissatisfied. ( $p=0.001$ ). A statistically significant result was observed with address when multiple logistic regressions was applied.

Table 3. Comparison of overall level of client satisfaction on outpatient services by selected socio – demographic characteristics in 3 zonal hospitals, Tigray, 2006(n = 422)

Characteristics	satisfied	dissatisfied	total N <sup>o</sup>	x <sup>2</sup>	p - value
<b>Sex</b>					
Male	102	118	238		
Female	120	82	184	1.047	0.306
<b>Age (in years)</b>					
15 – 24	44	61	105		
25 – 34	53	65	118		
35 – 44	42	57	99		
45+	45	55	100	0.341	0.952
<b>Educational status</b>					
Illiterate	75	96	171		
1 – 6 (primary)	41	70	111		
7 – 12 (secondary)	52	60	112		
Diploma and above	16	12	28	0.02	0.874
<b>Address</b>					
Urban	113	118	231		
Rural	71	120	191	8.30	<b>0.003*</b>
<b>Payment status</b>					
Paying	126	154	280		
Free	58	84	142	0.15	0.702
<b>Occupation</b>					
Governmental employee	23	18	41		
Merchant	11	19	30		
Farmer	66	93	159		
Jobless	54	72	126		
Others	30	36	66	12.420	0.133
<b>Type of individual</b>					
Patients	129	153	282		
FP and Vaccination users	16	8	24		
Family members	39	46	85		0.001*

N.B - \* significant

Table 4 – Degree of overall satisfaction by socio demographic variable of respondents in the sampled hospitals in Tigray, 2006 (n = 422)

	N <sup>o</sup>	%	Crude OR 95% CI	Adjusted OR 95% CI
<b>Sex</b>				
Male	222	52.6	1.00	
Female	200	47.4	1.039 (0.707- 1.527)	0.951 (0.601- 1.508)
<b>Age</b>				
15 – 24	105	24.8	1.00	
25 – 34	118	27.9	1.130(0.665 – 1.922)	1.158 (0.651- 2.059)
35 - 44	99	23.4	1.022(0.586 – 1.781)	1.059 (0.565 – 1.984)
45 <sup>+</sup>	100	23.6	1.134(0.653 – 1.971)	1.304 (0.678- 2.510)
<b>Educational Status</b>				
Illiterate	171	40.5	1.00	
1 – 6	111	26.3	0.750 (0.459- 1.223)	0.722 (0.420- 1.241)
7 – 12	112	26.5	1.109 (0.687- 1.790)	0.941 (0.513- 1.728)
Diploma and above	28	6.6	1.707 (0.761- 3.825)	1.105 (0.397- 3.077)
<b>Address</b>				
Urban	231	54.7	1.00	
Rural	191	45.3	0.618 (0.418- 0.913)*	<b>0.410 (0.217- 0.775)*</b>
<b>Payment status</b>				
Paying	280	66.4	1.00	
Free	142	33.6	0.844 (0.561- 1.271)	0.800 (0.511- 1.251)

Statistically significant = \*

Table 5 compared the relationship between the availability of drugs and supplies and the level of satisfaction with selected socio demographic characteristics. It showed that the Illiterates were less satisfied compared to the clients with a higher education. However, these finding was not statistically significant Sex was not associated with client satisfaction. Dissatisfaction was significantly associated with payment status (0.000). Those non paying and those in the older age groups were less satisfied than the paying and the younger ones. Those from the rural areas, and the repeat clients were less satisfied than the clients from the urban areas, and the new visits though it was not statistically significant. A statistically significant result was observed with payment status when multiple logistic regression was applied.

Table 5. Comparison of client satisfaction with the availability of drugs on outpatient services by selected socio – demographic characteristics in 3 zonal hospitals, Tigray, 2006

Characteristics	satisfied	dissatisfied	total N <sup>o</sup>	x <sup>2</sup>	p - value
Sex					
Male	76	141	217		
Female	56	133	189	1.339	0.247
Age (in years)					
15 – 24	31	68	99		
25 – 34	43	69	112		
35 - 44	28	68	96		
45+	30	69	99	2.540	0.468
Educational status					
Illiterate	54	111	165		
1 – 6 (primary)	33	72	105		
7 – 12 (secondary)	34	75	109		
Diploma and above	11	16	27	0.05	0.818
Address					
Urban	65	155	220		
Rural	67	119	186	1.93	0.165
Payment status					
Paying	123	147	270		
Free	9	127	136	<b>62.50</b>	<b>0.000*</b>
Frequency of visit					
New	92	156	248		
Repeat	40	118	158	6.10	0.013

N.B - \* significant

Table 6 shows the relationship of clients' satisfaction with the information provision to clients by health workers. From the table, sex is not associated with client satisfaction. It further showed that age, educational status, address and occupation were significantly associated with satisfaction. The younger age groups, the better educated (diploma and above), the governmental employees and the clients from the urban were found to be more satisfied. Those in the old age group, the illiterates, the farmers and those from the rural areas were less satisfied ( $p=0.0000$ .) respectively. Satisfaction of clients increased with the increase in education where as satisfaction decreased as age increases. Statistically significant difference was observed in the multiple logistic regression for education and occupation where respondents who at least read and write and the respondents who are jobless were more satisfied as compared to the illiterates and the governmental employees respectively.

Table 6. Comparison of client satisfaction with the information provision on outpatient services by selected socio – demographic characteristics in 3 zonal hospitals, Tigray, 2006

Characteristics	satisfied	dissatisfied	total N <sup>o</sup>	x <sup>2</sup>	p - value
<b>Sex</b>					
Male	119	103	222		
Female	106	94	202	0.015	0.901
<b>Age (in years)</b>					
15 - 24	68	36	104		
25 – 34	69	49	118		
35 - 44	50	49	99		
45+	37	63	100	19.06	<b>0.000*</b>
<b>Educational status</b>					
Illiterate	30	141	171		
1 – 6 (primary)	74	37	111		
7 – 12 (secondary)	98	14	112		
Diploma and above	23	5	28	143.90	0.000*
<b>Address</b>					
Urban	152	79	231		
Rural	73	118	191	31.95	0.000*
<b>Frequency of visit</b>					
New	135	126	261		
Repeat	90	71	161	0.70	0.403
<b>Occupation</b>					
Governmental employee	29	12	41		
Merchant	21	9	30		
Farmer	55	104	159		
Jobless	74	52	126		
others	46	20	66	39.349	<b>0.000*</b>

N.B - \* significant

Table 7 - 8 show the relationship between the clients waiting time to receive the services in the hospitals and level of satisfaction. The time spent to walk to the health institution was significantly associated with dissatisfaction. Those who walked  $> 2$  hours were more dissatisfied ( $p=0.004$ ). The clients who waited for more than 1 hour to see the Doctor were more dissatisfied compared with those who waited  $< 1$  hour. But this finding was not statistically significant. The clients who waited  $>2$  hours to give the laboratory specimen were more dissatisfied than those who waited  $< 1$  hour however the difference was not statistically significant. It again showed that clients who waited  $>2$  hours to receive laboratory results were more dissatisfied compared to those who waited  $<2$  hours but not statistically significant. Waiting time to see the Doctor after receiving the laboratory result was not significantly associated with dissatisfaction ( $p=0.106$ ). However there was no statistically significant result observed when multiple logistic regression was applied to the above differences. A statistical significant result was observed with payment status where those who are non paying were less satisfied compared to those who are paying when multiple logistic regression was applied.

Table 7. Comparison of client satisfaction with the waiting time to get the different outpatient services in 3 zonal hospitals, Tigray, 2006

Characteristics	satisfied	dissatisfied	total N <sup>o</sup>	$\chi^2$	p - value
<b>Walking time (hrs)</b>					
< 1 hour	100	96	196		
1 – 2 hours	40	50	90		
2 – 6 hours	20	48	68		
> 6 hours	24	44	68	11.889	<b>0.008*</b>
<b>Time to see Drs (hrs)</b>					
< 1 hr	134	132	266		
1 – 2 hrs	34	69	103		
> 2 hrs	16	37	53	3.358	0.187
<b>Giving lab specimen (n=153)</b>					
< 1 hour	59	51	110		
1 – 2 hours	5	18	23		
> 2 hours	3	17	20	3.690	0.297
<b>Waiting time to receive lab result</b>					
< 1 hour	50	38	88		
1 – 2 hours	13	21	34		
> 2 hours	4	27	31	0.411	0.938
<b>Waiting time to see the Dr after receiving the lab result</b>					
< 1 hour	55	49	104		
1 – 2 hours	15	21	36		
> 2 hours	8	35	43	0.520	0.771

N.B - \* significant

Table 8. Comparison of client satisfaction with the overall waiting time to get the outpatient services by selected socio – demographic characteristics in 3 zonal hospitals, Tigray, 2006

Characteristics	satisfied	dissatisfied	total N <sup>o</sup>	x <sup>2</sup>	p - value
<b>Sex</b>					
Male	118	93	211	4.103	0.043
Female	118	93	211		
<b>Age (in years)</b>					
15 - 24	94	11	105	4.681	0.197
25– 34	109	9	118		
35 – 44	93	6	99		
45+	97	3	100		
<b>Educational status</b>					
Illiterate	90	81	171	4.210	0.240
1 – 6 (primary)	63	48	111		
7 – 12 (secondary)	67	45	112		
Diploma and above	16	12	28		
<b>Address</b>					
Urban	133	98	231	2.544	0.111
Rural	103	88	191		
<b>Payment status</b>					
Paying	266	14	280	4.557	<b>0.033*</b>
Free	127	15	142		

N.B - \* significant

Highest satisfaction rate (93.8 %) was associated with the courtesy of the health care providers. Table 9 shows the relationship of clients' satisfaction with the courtesy and respect by the health workers. The table showed that age and address were significantly associated with satisfaction. Those in the middle age and the older ones (P. 0.032) and the clients from the rural (P. 0.033) were found to be less satisfied respectively. Those in the very young age group and those from the urban areas were more satisfied. Satisfaction of clients increased with very young age groups and urban residence where as satisfaction decreased as age increased and with rural residence.

Statistically significant result was observed in the multiple logistic regression for **age** where the clients in the middle age and old age were less satisfied as compared to the very young ones

Table 9. Comparison of client satisfaction with the courtesy and respect by health workers by selected socio – demographic characteristics in 3 zonal hospitals, Tigray, 2006

Characteristics	satisfied	dissatisfied	total N <sup>o</sup>	x <sup>2</sup>	p - value
<b>Sex</b>					
Male	204	18	222		
Female	192	8	200	3.071	0.080
<b>Age (in years)</b>					
15 - 24	104	1	105		
25 – 34	108	10	118		
35 - 44	94	5	99		
45+	90	10	100	8.780	<b>0.032*</b>
<b>Educational status</b>					
Illiterate	158	13	171		
1 – 6 (primary)	103	8	111		
7 – 12 (secondary)	108	4	112		
Diploma and above	27	1	28	2.448	0.485
<b>Address</b>					
Urban	222	9	231		
Rural	174	17	191	4.529	<b>0.033*</b>
<b>Frequency of visit</b>					
New	243	18	261		
Repeat	90	8	161	0.640	0.424
<b>Occupation</b>					
Governmental employee	39	2	41		
Merchant	27	2	29		
Farmer	144	15	159		
Jobless	122	4	126		
others	64	2	66	6.890	0.142

N.B - \* significant

## **I . FOCUS GROUP DISCUSSION**

### **RESPONSES OF FOCUS GROUP DISCUSSION BY TOPICS**

#### **TOPIC 1: - Courtesy and Respect by Doctors/Health Workers**

Almost all the discussants explained that they are happy by the good courtesy and respect of the Doctors/health workers. However, few of the participants reported there is still a little problem in respecting clients. One male and other female discussants reported summing up their ideas, "Doctors almost have good courtesy and respect to their clients, but some of their assistants shout at and insult clients and are still rude and unethical".

Most of the discussants stated and agreed that they are very happy, because they are able to see good changes in courtesy and respect. One male participant said "This is a special and interesting condition to see a new situation in respecting clients ever seen in our experiences in the last many years." Finally one female discussant expressed the usefulness of courtesy and respect" Most of the Doctors/health workers are good and we feel at ease to see them" with another male participant strengthening this idea said, "The rare assistants who are acting unethically will learn and improve"

This therefore is indicating good changes but there are still problems related to courtesy and respect to clients. One should pay attention to improve the situation in general and with the assistants in particular.

## **TOPIC 2 - INFORMATION PROVISION TO CLIENTS**

The existing method/s used in the hospitals to provide information to clients about the services and their health problems was reported better in general by most of the discussants. One male discussant said information about our health problems and to indicate the service areas is necessary because we don't spend out time going around like a foolish and it is also important to understand our health problems and know what we have to do and how to apply the orders of the Doctors.

Additionally almost all the participants explained there is a good information provision in the registration rooms of the hospitals. Some of the discussants however, expressed that the method of information provision used has a problem and thus they have to go around repeatedly to get the room/s they are looking for where they can get the service. Furthermore, most of the discussants shared this idea by saying " The existing information provision is good for those who can read and write" Two female participants who are from the rural areas turn by turn said" Most of us are illiterates so there is a problem with the information provision". Almost all discussants finally said it is generally a good practice but we need a modified method of information provision for the illiterate clients visiting the hospitals.

Therefore, it can be concluded that there is still a problem in the provision of information particularly for those who are illiterates. This calls for making an effort to solve this problem.

### **TOPIC 3 – TIME SPENT, COMPLETENESS OF PHYSICAL EXAMINATION AND PRIVACY**

Most of the participants reported that physical examination in most of the times is done in a better way than the previous times though not complete. Almost all the discussants said this is a good change for us. Some of them expressed their ideas comparing the completeness of the physical examination, the time spent with them and the privacy with the private health institutions by saying “We are saying there is a better physical examination in the hospitals than before, but we know that there is still a difference. The physical examination in the hospitals has less weight when compared with the physical examination in the private institutions. It is better to be examined in the private health institutions for complete physical examination and privacy.” Almost all the participants said there is no privacy in the examination rooms. They further said there is no curtain (screen), doors are frequently opened while patients are on examination

Therefore, additional assessment and support is necessary to strengthen the good changes in doing the physical examination for clients. Furthermore, more work should be done to improve the privacy related problems.

### **TOPIC 4 – LABORATORY AND X – RAY SERVICES**

Most of the discussants said they get the common laboratory procedures. Almost all the participants explained that examination for blood and urine is always possible. Some of the discussants reported there is delay in giving the specimens and receiving the results from the

laboratory and x – ray units. Almost all discussants said we found it possible to get the laboratory services but it is difficult to get the x – ray services. There is a problem in the x – ray services. One male discussant said “though there is a problem in getting the x – ray services, when we sometimes get the service some of the x – ray technicians are very friendly, kind and make us feel at ease and do the procedures happily.”

So the result of the discussion is showing there are still problems in getting the services particularly the x – ray services. The delay in giving the specimens and receiving the results is also another problem.. Thus, the concerned body needs to consider the extent of the problem and try to find a solution for it.

#### **TOPIC 5 – DRUGS AND SUPPLIES**

All of the discussants said they get only some of the prescribed drugs in the hospital pharmacies in most of the times. One male participant reported the lack of the drug/s is worse in the night because all other private pharmacies are closed during the night. Trying to express the usefulness of the availability of drugs and supplies almost all the discussants said hospitals must always be able to have necessary drugs. One male discussant expressed their feeling by saying” We are glad that a huge and attractive hospital is constructed here. A huge but an empty building is useless for the people. The government must do something and fulfill the hospital at least with basic drugs, laboratory and x – ray services.” Another male discussant also explained his worryness”Those assigned in the pharmacy units do have a problem in reading and understanding English.

They return us back to the examiner to ask what is written. As a result we doubt that by mistake they can even give us something that is not ordered by the doctors." Most of the discussants also explained that the staffs in the pharmacy units do not give adequate information about the ordered drugs and even they respond to any question unfriendly.

Therefore, one can clearly understand that one of the factors for clients' complaint is the lack of drugs and supplies. This indicates that the hospitals together with the concerned body must find out a mechanism to improve this common problem in most hospitals.

## **TOPIC 6 - MAJOR FACTORS THAT CONTRIBUTE TO THE DISSATISFACTION OF CLIENTS**

Almost all discussants said the lack of drugs and supplies and inadequate information provision to clients are the major factors that contribute to the dissatisfaction of clients.

One male discussant reported that they keep patients longer before referring them to the appropriate places. He said, we are told to go after we spent a lot of money which is off course very difficult and that we do not agree with. Another male discussant expressed his feeling summing up "All what the participants explained are common problems for all of us. He further said, generally there is a delay in all types of the hospital services and these are the factors that make us dissatisfied." Another female discussant also said "these are not the only factors but there is poor handling and respect in certain health workers that I am worried about."

## **TOPIC 7 – SUGGESTION TO IMPROVE THE SERVICES IN THE OUT PATIENT DEPARTMENTS OF THE HOSPITALS**

Almost all the participants said sending patients outside the hospitals to buy drugs must be stopped. Most of the discussants also reported the need for adequate laboratory and x – ray services in the hospitals. One male discussant said, "It should not be only a beautiful building. It should be internally fulfilled and corrected." Another male discussant also said the capacity of the management body of the hospitals must be strengthened because without capable leaders it is not possible to manage and improve the situation in the hospitals.

One adult male discussant furthermore reported an interesting idea "A blood bank must be present in a hospital. We are always asked to bring blood and we have to buy from the young age groups who always give their blood for money. It is a difficult problem because we don't know the health status of those who give their blood for money. Who knows if they have HIV/AIDS?"

Generally, almost all the participants suggested there is a lot to be worked out by the concerned bodies to change the situation in the hospitals to bring about client satisfaction.

## **II . INDEPTH INTERVIEW**

An in depth interview was carried out to assess the responses of the key personnel of the hospitals about the factors related to clients satisfaction in the outpatient departments. From each hospital four individuals were interviewed and responded to the questions. Out of the key personnel one medical director and two administrators (where the medical directors were not around during the interviewing time), three pharmacy heads, three laboratory heads and three matrons were interviewed.

Questions on the presence of standards and or guidelines in the different areas of the outpatient departments were asked for the key personnel in each hospital. All of them except the administrators said that there are different standards and or guidelines in all the respective areas of the outpatient departments. Most of them agreed that the health workers at different levels do not use the standards and or guidelines always. Almost all were able to tell the types and the advantages of the standards and or guidelines like the treatment guideline, laboratory procedures, rational drug prescription, dispensing and use etc) while the two administrators told the advantages but did not know what the types are. All the key personnel concluded that the use of the available standards and or guidelines is helpful to all health workers and must be an area to be further assessed.

All the key personnel were also asked about drugs and supplies. All of them responded that drugs and supplies are not always available in the regular pharmacy of the hospitals. All the respondents suggested that the main reason is the long-standing problem the “shortage of Budget”.

They all said that this has been the concern for the last many years because there was no timely and corresponding change in the allocation of budget while the number of health care users is extremely increasing every time.

For the question “are drugs and supplies always available in the special pharmacies in the hospitals?” “Most of them responded yes for the paying, while one hospital administrator and pharmacy head said it is not always available because drugs and supplies are not always available in the regional drug wholesalers and distributors in the region. Another reason which they forwarded and strongly commented was the “Lack of a clear guideline and legal procedure about how to lead and run the special pharmacies.”

The other question asked was about the provision of information. Most of them including the administrators replied patients were not provided with necessary and adequate information about the outpatient services and their health problems. They said this was because of the shortage of the health workers in the hospitals and the high load of work for which they have no time. One pharmacy head said, patients were not provided with the necessary and relevant information because of the “inadequate capacity of the junior health workers and health assistants who are assigned in the different working areas of the outpatient departments as in the pharmacy units”. One of the respondents, the matron said information is provided to patients but “If patients ask”. It is explained by the respondents that information is provided verbally and using written information posted in every corner of the hospitals.

About the comfort and cleanliness of the waiting and examination rooms, two of the respondents replied that the waiting rooms aren't comfortable but fairly clean while the examination rooms are quite comfortable and clean. The others said yes both the waiting and examination rooms are comfortable and clean.

The key personnel were also asked to answer the question "What are the major problems that you think contribute to the dissatisfaction of clients?" All of them gave the same answer that lack of drugs and supplies in the hospitals pharmacies was the main factor for clients' dissatisfaction. Reasons they gave for the lack of drugs was lack of adequate budget and improper handling and use of the free paper. Most of them also replied that shortage of health workers of different types is another reason for dissatisfaction. Some of them explained dissatisfaction of clients also results from inadequate and unclean latrines and long waiting time to get the services in the hospitals.

The respondents were also asked the question "How do you accommodate clients dissatisfaction?" All the key personnel interviewed said that they accommodate clients complaints by the use of suggestion box placed at a convenient place and through the complaint committee. They all suggested that clients do not always use the suggestion boxes and rarely clients go through the process of the complaint committee. Some of the respondents replied that they used to discuss with the Doctors/health workers whenever there was a complaint from the clients in order to find a solution. They said, they believe that involving the health workers in such a discussion helps to identify and solve the complaints whenever that arises.

Some of the key personnel also responded clients complaints were accommodated by having a discussion with patients themselves that happens sometimes. Few of them said the management committee of the hospital gets together to listen to what clients complain about, though this rarely happens.

Question on the measures taken to make changes in the provision of health service delivery in the out patient departments of the hospitals was also asked. The answer for this question by all the key personnel of the hospitals was “yes when compared with the previous experiences”. All the respondents said that clients/patients currently get into the hospitals every time they arrive without any question. A similar answer given by every respondent was “No patient/client keeps a long line at or around the gate of the hospitals.” As a result clients/patients do not have a complaint around here.

They also said that” patients/clients get ordered services in the laboratory and x – ray departments with in the same day without long appointment”. All of them said another newly introduced change is the establishment of a “Triage” in each hospital that already became functional where every patient/client is screened and directly send to the appropriate place to get the services.

Another measure taken they all mentioned was the assignment of additional staffs in the registration rooms of the hospitals to facilitate the work flow by avoiding delay in the areas for the whole 24 hours. One of the pharmacy heads told that they exchange drugs and supplies with other hospitals, district health offices, the hospitals of the defense minister and other NGOs to

make the basic and relevant drugs and supplies available in the hospitals to decrease the complaints of the clients.

The respondents also explained the efforts to improve the information provision by health workers. They said that all hospitals have posted every information helpful for the workflow in convenient places though much helpful for those who can read and write.

Finally all the key personnel were asked about “what should be done to improve the service delivery in the hospitals in particular in the outpatient departments of the hospitals”?

- All of them responded that the first priority must be the consideration and revision of the existing budget with out any delay.
- They further said that motivating factors for health workers especially for the highly qualified ones like improving the duty payment is necessary to avoid the frequent turn over of the staffs.
- Most of them said the fulfillment of different standard medical equipment and the establishment of blood bank are also among the necessary requirements for the zonal hospitals to save the lives of many clients.
- All the key personnel strongly insisted that the preparation and implementation of the "restructuring of the hospitals" must be the centre of focus as this is the major area requiring a change since an appropriate structure for the hospitals is the way for improvement in their activities.

## DISCUSSION

This study has revealed that the satisfaction level with the outpatient services in the zonal hospitals was 43.6 %. This satisfaction level report is low when compared to the reports of the studies conducted in Jimma hospital and in Mozambique which showed 57.1% and 55% respectively (4, 15), but is comparable with studies conducted in the hospitals of the Amhara region where nearly half of the clients were either partially satisfied or dissatisfied. (6) and in public facilities where satisfaction with different aspects of care were as low as 41% in West Indies.(18). On the other hand this finding is higher than the reports by other researchers that showed 22%, 37%, and 37.2. % in Gondar, in Mekelle regional referral hospital and the British social attitudes survey of 1990 and respectively. (5, 19, 20). The suggested reasons for this difference could be, due to the better attention by the concerned governmental higher officials and the efforts made to make changes in the service delivery process of the hospitals by involving their staffs that insisted them to assess the existing problems in the hospitals in the last 2 years. Another study conducted in Singapore hospitals has revealed that 40% of the total number of patients reported service quality was below their expectations (8).

In the analysis of client satisfaction the very satisfied and very dissatisfied were categorized to satisfied and dissatisfied groups because the numbers of the respondents in the very satisfied and dissatisfied were small. Similarly in the analysis of client satisfaction, neutral responses were classified as dissatisfied considering that they may represent a fearful way of expressing dissatisfaction. This is likely because the interview was undertaken within the hospitals and

clients may have been reluctant to express their dissatisfaction feeling of the services they received. One study of patient satisfaction emphasized that the relationship of dependency which exists between patients and their relatives on service providers. It was argued that patients can simultaneously feel both gratitude and dissatisfaction with the service and that they may be unwilling to express their dissatisfaction for fear of antagonizing service providers and experiencing even worse service in the future (20).

The study has shown that lack of drugs and supplies in the hospital pharmacies was the major problem. Nearly 34 % of the clients are non paying and more than 2/3<sup>rd</sup> (61%) of those clients with prescription paper for drugs did not get the ordered drugs from the hospital pharmacies. This is a similar finding with that of the study conducted in Jimma hospital where 63.7% of the clients lacked drugs from the hospital pharmacies and 36.4% of the clients were non paying and got the services free of charge (4). But this is a higher finding than that of the study conducted in the hospitals of the Amhara region where about 1/3<sup>rd</sup> of the clients did not get the prescribed drugs (6).

The reason could be due to the increase in the number of outpatient services users without a corresponding and adequate change in the hospitals. The inability to get the prescribed drugs from the hospitals is in line with the report from the study conducted in Manica, Mozambique where failure to get the prescribed drugs was found to be the most common complaint associated with lower satisfaction (15). Similarly another study conducted in Mekelle referral hospital showed 86.6% of the clients received the prescription paper for drugs out of which 82.2% of them were not able to get the prescribed drugs from the hospital pharmacy. (19)

Another study conducted in South Africa also revealed that access to drugs was one of the most suggested priorities for improvement of public health services (21). Studies in Ghana and Nigeria in the early 1990s also found that about 30% of public clinics lacked drugs. A quarter of rural clinics in Coted'Ivoire had no drugs (11).

An in depth study of the Iringa district in Tanzania also showed that patients bypassed low quality facilities in favor of those offering high quality consultations and prescriptions, staffed by knowledgeable physicians, and better stocked with supplies. As it is mentioned in the result, dissatisfaction because of lack of drugs in the hospitals pharmacies was statistically significant with payment status. (AOR, 0.075 (0.035- 0.161). \* About 63.6% of the clients from the rural areas and about 92.6 % non paying clients were dissatisfied due to lack of drugs. This could be associated with the inability to get the drugs and supplies in the hospital pharmacies and might have exposed the non paying clients to unaffordable price in the private pharmacies.

Strengthening these results the findings of the qualitative methods, the Focus Group Discussions and the In depth Interviews have similarly showed that the lack of drugs and supplies in the hospitals was the major problem causing client dissatisfaction. The finding also indicated that there are many staffs in the pharmacy units who lack the knowledge and the skill to work in the pharmacy units. In the Focus Group Discussions one participant summing up the ideas said, "A huge but an empty building is useless. The government must do something and fulfill the hospitals at least with basic drugs, laboratory and x ray services."

This finding could be very important if it could be possible to reorganize hospitals in such a way that they can take the initiatives to introduce and implement the health care and financing strategies. However reorganizing the hospitals in such a way definitely requires further investigations and decisions by the concerned higher officials to deal with the problems so that clients can be able to get what they expect and utilize the hospitals. Strengthening this idea some authors reported that in Sub Saharan Africa patients consider medicine availability as the cornerstone for quality and they are overwhelmingly willing to pay for medicines (22). Another pilot test of cost recovery on primary health care in Niger has revealed improvement in the quality of care, particularly improved availability of drugs (23). Many studies have also indicated that patients equate availability of drugs with high quality services.

In line with the above findings, in Kenya a study similarly 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 (10).

46.7% of the clients were dissatisfied with the provision of information about the hospital services and their health problems. This is quite a high dissatisfaction rate when compared to the study conducted in FP service delivery points in Bahrdar town with a 25.2% dissatisfaction rate (24). But the reason for the wide difference could be due to the difference in the number and type of health care providers in those mentioned service delivery places and the difference in the activities they run in their respective areas.

Another study conducted in Mekelle regional referral hospital also reported that incompleteness of information to the clients about the hospital services and their conditions was identified as one of the sources for client dissatisfaction (19). A study conducted in South Africa revealed lack of communication and important messages to patients were identified as an important issue impacting on quality thus affecting client satisfaction.(21).

Other authors have also reported that sources of dissatisfaction with health care include the inadequacy of information dissemination about patients' conditions and treatment(20, 30). Dissatisfaction due to information provision is also inline with a report from a similar study conducted in Singapore hospitals where "Doctors should thoroughly explain medical conditions to patients" was rated first among the identified sources for the dissatisfaction of the patients (8).

Similarly providing patients with relevant and useful information is linked with increased patient compliance. A recent study surveyed 74 physicians and a sample of their patients in order to compare the importance of information delivery as an indicator of the quality. Provision of information was ranked 2<sup>nd</sup> in importance by patients but 6<sup>th</sup> by physicians (3). Furthermore, the Focus Group Discussions and the In depth Interviews indicated that there is a problem in getting relevant and adequate information about the services and their health problems. On the other hand, the result showed that there is a better information provision in the registration rooms of the hospitals. In conclusion, one of the rural participants on behalf of the discussants expressed "It is generally a good practice but we need a modified method of information provision for the illiterate clients visiting the hospitals."

Highest satisfaction rate (93.8 %) was associated with the courtesy of the health care providers. This is nearly a similar finding when compared with the finding of the study conducted in Bahrdar town which showed nearly 84.4% satisfaction rate on good provider greeting and respect in the governmental family planning service delivery points including the hospital (24).

This high result could be expected in the study area hospitals because of the new change introduced in the hospitals in relation to the improvement of the service delivery which could have brought about staff attitudinal changes resulting in courtesy and respect. So clients might have responded by comparing their previous experience with the current changes they are observing. Secondly, as the data was collected within the hospitals might have introduced a social desirability bias.

The same result was obtained from the Focus Group Discussions. The result showed that generally there is a good improvement in the courtesy and respect by health workers. But the conclusion of the result indicated that there are still problems with the courtesy and respect by the doctors/health workers particularly with the assistants of the doctors. One participant concluded their ideas saying "Doctors almost have good courtesy and respect to their clients, but some of their assistants shout at and insult clients and are still rude and unethical."

In the contrary dissatisfaction of clients due to the lack of respect and courtesy was among the major reasons for dissatisfaction in Gondar. The finding was rated to be 36 % for the unsympathetic behavior of the health workers (5).

The report of the study in Mekelle referral hospital also showed that lack of courtesy and respect by the health care providers was one of the reasons for the dissatisfaction for clients. In a study conducted in South Africa, the comments made about the poor quality of the relationships with the practitioner included: lack of empathy, mistreatment, lack of respect and lack of communication (21).

Similarly, in Egypt participants in a discussion group complained about the attitude of staff at the local rural hospital, with one respondent summing up the experience “They have their noses up in the air and neglect us” (11). In another report in India clients report that they value health facilities that are open at convenient times, with staff who treat them with respect. The study conducted in Singapore hospitals is also in agreement with the findings of these studies where “Doctors/staff should treat patients with dignity and respect”, was rated second among the sources of the dissatisfaction of clients. Another author strengthening the relevance of courtesy and respect to the clients has also stated that” patients are not a case" or the “fractured hip", but persons entitled to respect and privacy". Impersonal, aloof efficiency and brusqueness of hospital staff is not acceptable (9).

As to this study, 43.2% of the clients were dissatisfied by the overall waiting time to get the services. In line with this, the result of the Focus Group Discussion also showed that there is a delay in giving the specimens and receiving the results from the laboratory and x ray units. This is a higher finding when compared to the report of the study conducted in Jimma hospital which showed 20.4% of the clients have reported long waiting time (4).

But the dissatisfaction rate with waiting time to receive the services in the study area is lower compared to the waiting time in public facilities in West Indies where 47% dissatisfaction rate was reported (18).

This better finding could be due to the ongoing changes because of the newly introduced reform in the study area hospitals where an improvement in the service delivery process and staff attitudinal change might have resulted.

In a study conducted in Mekelle referral hospital long waiting time to get the services was found to be one of the sources for the clients' dissatisfaction (19). In agreement with this study waiting hours for getting hospital services were too long almost in all of the hospital services in the Amhara region hospitals (6). According to Solomon's review of patient satisfaction data from four national surveys carried out between 1991 and 1992 and collected for the King's Fund showed waiting times for out patient appointments were particular sources of dissatisfaction. (20). In El Salvador, also infrequent and inconvenient operating hours greatly reduced the use of health posts. According to the focus group respondents, "Health posts operate only twice a week. Waiting time is three hours on average (11).

Generally, from this study it is found out that client's satisfaction with the outpatient departments services increased with the timely processes in the registration room and a good courtesy and respect of health workers.

Analysis of overall satisfaction by socio demographic characteristics showed that educational status, and age where respondents who have tertiary education (diploma and above), and the

older age group were more satisfied as compared to the illiterates and the younger age groups respectively. These findings however were not statistically significant. This is contrary to most studies where the respondents with a tertiary education were found to be more satisfied in this study.

This could be due to some important changes in the hospitals services as in attitudinal changes of the health workers and the presence of newly introduced information provision methods like the written and posted information in every corner of the hospitals about the services and the work areas of the outpatient departments particularly easily understandable to those with a better educational status.

This also could be true for those from the urban areas and governmental employees as both of them are assumed to be from the towns with a very short walking distance and could understand written information and or directions.

Older age groups were more satisfied which is a similar finding like that of other studies as in Jimma (4). This could be explained by factors like confidence in medical care system and satisfaction in life in general (25). But these differences were not statistically significant. Other socio demographic characteristic like sex was not associated with client satisfaction.

Dissatisfaction was significantly associated with address where clients from the rural areas were less satisfied compared to those from the urban areas. This could be because the clients/patients from the rural areas: -

- Could have waited long to get the services

- Could have been asked to buy drugs and supplies from private pharmacies for a price that they cannot afford
- Could have paid much amount of money for laboratory and x – ray services.

As a result, the clients therefore could have been exposed to unexpected and much amount of expenses including for their daily living expenses.

## **STRENGTH OF THE STUDY**

- In addition to the newly introduced changes in the hospitals aiming at improving the existing service delivery processes, the findings of this study can be used as a base line to help planning and improve performance in hospitals of the region.
- The study was supplemented by Focus Group Discussions and In depth Interview which was very helpful in finding out the details of the problems. Thus, it will help to find a way for improvement in the hospital services

## **LIMITATION OF THE STUDY**

- Observation during the service delivery to the clients and follow up of the clients at the same time was not included in the study.
- The study did not focus on the health care providers.

## CONCLUSION

Based on the findings of this descriptive cross sectional study, the following conclusions can be drawn.

- Many clients are found to be dissatisfied with service provision of the outpatient departments of the hospitals. These include:-
  - Lack of drugs and supplies in the hospital pharmacies
  - Inadequate information provision about the hospital services and their health problems
  - Long waiting time to get the hospital services.
- The results of the Focus Group Discussions and In depth Interview showed similar findings, but also found out that
  - The hospitals lack an adequate budget, trained man power to fulfill the clients needs
  - there are no corresponding changes undergoing to improve the hospitals facilities
- Therefore from the problems stated above, the level of clients' dissatisfaction is high in the outpatient departments of the Tigray zonal hospitals.

# **RECOMMENDATION**

## **AT A REGIONAL HEALTH BUREAU LEVEL**

### **1 - DRUGS AND SUPPLIES**

The concerned body (Regional Health Bureau) needs to understand the extent of the problem and plan to look for different mechanisms to enable the hospitals keep adequate stock of essential drugs and supplies.

Some of the mechanisms that need to be reassessed and worked out are; -

- Revising the budget allocation for the hospitals with particular attention to drugs and supplies.
- Reassessment of the functions of the existing special pharmacies in relation to the set legal procedures to avoid lack of uniformity in their functions. This must aim at legally empowering the hospitals to use and control the money from the special pharmacies uniformly based on the legal functional procedures.
- At zonal hospitals for a proper drug supply management the assignment of a better-qualified health worker/professional (if possible a pharmacist) and an adequate support and close follow up by the Health Bureau need to be thought about.

### **2 – FULFILLING MANPOWER AND STANDARD MEDICAL EQUIPMENT - To improve**

quality and access in order to address the problems mainly of those from the rural

- Encourage and retain the health workers considering for improvement and strengthening the existing motivating factors for all health workers is important. These should include-

- Making a change in the amount of duty payment
- Recognition for good jobs and awards
- Short and long-term trainings.

- To fulfill the zonal hospitals with the basic medical equipment and laboratory reagents, chemicals and other materials in the laboratory and x – ray units is necessary through the implementation of the Health Care Financing strategies and by dealing with both governmental and non governmental organizations

3 - Developing a new structure of the hospitals to bring about a change in the following

- The revision and improvement of the existing general budget of zonal hospitals.
- The development of attractive work environment
- Capable and strengthened management body of the hospitals
- Quality, Effectiveness and Access.

4 - Establishing a regular mechanism for a technical support to the hospitals.

5 – Conduct a similar study on the health care providers side.

6 – A plan (short and long term) to establish a blood bank in the zonal hospitals.

## **AT THE HOSPITALS LEVEL**

### **1 – FOR ADEQUATE AND CONTINUOUS INFORMATION PROVISION**

In addition to the existing information provision methods in the hospitals,

- It could be important to establish a different method (an information desk) at a convenient corner of the hospitals which would particularly be helpful for the majority of the clients who are illiterates.
- Regular provision of on job training for all health workers should be in place to help them change their attitudes in order to provide their clients with all the relevant information.

- The assignment of the right staffs in the right places for the provision of appropriate and relevant information

2 – Improve ethical problems - To avoid long waiting time and the lack of courtesy and respect:

- Strengthening and empowering the management body of the hospitals to enable them develop a method about how health workers could be accountable and responsible for what they do.
- Regular on job training for health workers about the existing ethical problems and the way to improve.
- Improve the grievance and complaining procedures in a way that clients can be encouraged and use it appropriately.

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# ANNEXES

## ANNEX 1 - DEFINITION OF TERMS

Hospital, Out Patient Department, Assessment, Quality, Service, quality, Satisfaction, Customer.

**Hospital** – Can be defined as an organized effort to provide a specific set of medical services, usually physically located in one or several buildings, and related to specialized care (Diagnosis and Treatment) and care (as opposed to the primary care level) with the input of health professionals, technologies and facilities.

**Zonal hospital:** - Is the second referral hospital level for District hospital within the four-tire health service system. It provides both outpatient and inpatient services with 150 beds capacity which renders service round the clock for a total population of 1, 000, 000.

**Out Patient Department:** - Part of a hospital where different clients get different services as an outpatient. It is the first step of getting the hospitals services.

**Assessment** - Is the process by which the characteristics and needs of clients, groups or situations are evaluated or determined so that they can be addressed. The assessment forms the basis of a plan for service or actions.

**Service:** - any activity undertaken to meet the social needs.

**Quality** - User based quality is defined as “fitness for use”, which means the consumer’s perception of quality. It is also defined as meeting the desires and expectations of customers”

**Client/Customer / Consumer** - “An individual who purchases or uses a good or service”

**Customers Satisfaction** – Meeting the perceived needs and the expectations of the clients in relation to factors related to the Health care provider and Amenities.

**Complete physical examination:** - Taking Vital Signs, Undressing and examining different parts of the body of a client/patient.

## ANNEX 2

### ENGLISH VERSION QUESTIONNAIRE ADDIS ABABA UNIVERSITY, FACULTY OF MEDICINE, DEPARTMENT OF COMMUNITY HEALTH

Questionnaire for data collection on the assessment of the level of customers' satisfaction with the outpatient health care services in Tigray zonal hospitals.

#### IDENTIFICATION

Type of institution -----

Name of the institution-----

Address of the institution-----

Institution code N<sup>o</sup>-----

#### Verbal Consent Form Before Conducting The Interview

Greetings:

Hello, How are you?

My name is ----- . I am currently a student in the AAU, Department of Community Health, who is now going to conduct a survey. I would like to interview you few questions about the out patient health service provision of this hospital. The objective of the study is to assess the level of customers' satisfaction with the outpatient health services of the hospital and to identify the factors affecting the satisfaction of customers in Tigray zonal hospitals, which will be important to improve the health service delivery of the hospitals. Your cooperation and willingness for the interview is very helpful in identifying the problems related to the issue. Your name will not be written in the form and I assure you that all information that you give will be kept strictly confidential. Your participation is voluntary and you are not obliged to answer any question you do not wish to answer. If you are not still comfortable with the interview, please feel free to stop it any time you like. Do I have your permission to continue?

1 – If yes, continue to the next page

2 – In no, skip to the other participant

Interviewer's name and code-----, signature-----

Date if interview-----, Time started \_\_\_\_\_, Time finished -----

Supervisor's name -----, Signature -----

I thank you for your cooperation

## GENERAL INSTRUCTION

All questions have pre-coded response. It is therefore very important to follow the following instructions while you are interviewing respondents and recoding their answers.

- Ask each question exactly as it is written on the questionnaire.
- Do not read the pre code response to respondents. Listen only to the response of respondents.
- Circle the response in the response column that best matches the answer of the respondent.

## PART ONE: SOCIO – DEMOGRAPHIC CHARACTERISTICS

S.N <sup>o</sup>	QUESTIONS	RESPONSE	CODE
1	Sex	1. Male 2. Female	
2	Age (in years)		
3	Marital Status	1- Single 2 –Married 3 –Divorced 4 –Widowed	
4	Educational Status	1 – Illiterate 2 – Grade 1 – 6 3 – Grade 7 – 12 4 – Diploma and above	
5	Occupation	1 – Governmental employee 2 – Merchant 3 – Farmer 4 – No job 5 – Other	
6	Address	1 – Urban 2 – Rural	
7	Payment status	1 – Paying 2 – Free	
8	Status of the individual	1 – Patient 2 – Clients for F.p, Imm. 3 – Mother or others who accompany the patient	
9	Reason for visit	1 – Illness 2 – Family planning 3 – Others (imm, inj, dressing)	
10	Frequency of visit	1 – New visit 2 – Repeat visit	

F.P – Family Planning, Imm – Immunization, inj – Injection

**PART - TWO: QUESTIONS ON RESPONDENTS SATISFACTION**

S.N <sup>o</sup>	QUESTIONS	RESPONSE	CODE
1	Did you feel that the schedule (clinic) hours at the health facility was convenient for you?	1 – Yes 2 - No	
2	How long (minutes/hours) does it normally take you to get to the health service?	1 –Less than 1 hour 2 –1 – 2 hours 3 – 2 - 6 hours 4 – more than 6 hours	
3	How much are you satisfied with the information of the service of the hospital?(eg, In locating the rooms for registration, exam. rooms, lab and drug dispensing).	1 – Very satisfied 2 – Satisfied 3 - Neutral 4– Dissatisfied 5– Very dissatisfied	
4	Was there any delay in the health institution’s registration process?	1 – Yes 2 – No	
5	How long did you wait before seeing a Doctor?	1 – Less than 1 hour 2 – 1 – 2 hours 3 – More than 2 hours	
6	How much are you satisfied with the time spent waiting to be seen by the a health worker	1 – Very satisfied 2 – Satisfied 3 - Neutral 4– Dissatisfied 5– Very dissatisfied	
7	After seeing a Doctor how long does it take you to be attended by a Nurse/other staff for injection, dressing	1 – Less than 1 hour 2 – 1 – 2 hours 3 – More than 2 hours	
8	Were you satisfied with the queue process to see a Doctor?	1 – Very satisfied 2 – Satisfied 3 - Neutral 4– Dissatisfied 5– Very dissatisfied	
9	How satisfied are you with the courtesy and respect of the Doctor/Nurse during your visit?	1 – Very satisfied 2 – Satisfied 3 - Neutral 4– Dissatisfied 5– Very dissatisfied	
11	How satisfied are you by the way the Doctor examined you?	1 – Very satisfied 2 – Satisfied 3 - Neutral 4– Dissatisfied 5– Very dissatisfied	

12	How satisfied are you with the measures taken to assure privacy during your examinations? For example, a private room, Curtained or Screened area, etc...	1 – Very satisfied 2 – Satisfied 3 - Neutral 4– Dissatisfied 5– Very dissatisfied	
13	Were any Laboratory and x-ray/ultrasound procedures ordered to you?	1 – Yes 2 – No	
14	If yes, did you get all the ordered procedures in the hospital?  For Laboratory  For X – ray	0 – Not ordered 1 – Yes all 2 – Some only 3 – None  0 – Not ordered 1 – Yes all 2 – Some only 3 - None	
15	If yes, how long did you wait to give the Lab specimen?	0 – Not ordered 1 – Less than 1 hour 2 – 1 – 2 hours 3 – More than 2 hours	
16	How long did you wait to be x – rayed?	0 – Not ordered 1 – Less than 1 hour 2 – 1 – 2 hours 3 – More than 2 hours	
18	How long did you wait to see the Doctor after receiving your results?	1 – Less than 1 hour 2 – 1 – 2 hours 3 – More than 2 hours	
19	How satisfied are you with the access of the toilets?	1 – Very satisfied 2 – Satisfied 3 - Neutral 4– Dissatisfied 5– Very dissatisfied	
20	How satisfied are you with the cleanliness of the toilets?	1 – Very satisfied 2 – Satisfied 3 - Neutral 4– Dissatisfied 5– Very dissatisfied	
21	How satisfied are you by the waiting time to get the health service and get back?	1 – Very satisfied 2 – Satisfied 3 - Neutral 4– Dissatisfied 5– Very dissatisfied	

22	Were drugs and supplies ordered to you?	1 – Yes 2 – No	
23	If yes, were you able to get them in the hospital pharmacy?	1 – Yes all 2 – Some but not all 3 – None of them	
24	How satisfied are you with the availability of drugs and supplies?	1 – Very satisfied 2 – Satisfied 3 - Neutral 4– Dissatisfied 5– Very dissatisfied	
25	How do you evaluate the overall cleanliness and comfort of the waiting area, examination room and the compound?	1 – Very satisfied 2 – Satisfied 3 - Neutral 4– Dissatisfied 5– Very dissatisfied	
26	How satisfied are you with the completeness of the information given to you about your problem? (By the health providers)	1 – Very satisfied 2 – Satisfied 3 - Neutral 4– Dissatisfied 5– Very dissatisfied	
27	Were you satisfied with the measures taken to assure confidentiality about your health problem?	1 – Very satisfied 2 – Satisfied 3 - Neutral 4– Dissatisfied 5– Very dissatisfied	
28	Would you recommend the services of this hospital to someone else?	1 – Yes 2 – No 3 – I do not know	
29	How do you rate your overall level of satisfaction regarding the delivery of the health service you received?	1 – Very satisfied 2 – Satisfied 3 - Neutral 4– Dissatisfied 5– Very dissatisfied	

## **ANNEX 3**

### **PART THREE: - QUESTIONS FOR THE QUALITATIVE METHOD**

#### **INDEPTH INTERVIEW**

- A checklist with question areas/issues and specific probing questions for the key informants in the hospitals to collect their suggestions

#### **1 - STANDARDS AND OR GUIDELINES**

1.1 – How do the health workers work? Is there a standard and or a guideline for the health workers to provide the health services to the clients at the OPD? (See the documents)

In the Registration room,

Examination room,

Pharmacy unit

Laboratory and X-ray units

For example, Treatment guideline in OPD, Time to wait in every room, (for registration and in the exam room for examination and other procedures, the type of health

Professional/worker in that room, medical equipment and supplies in each exam room and etc).

#### **2 - DRUGS AND SUPPLIES**

2.1 - Are drugs and supplies always available in the regular pharmacy of the hospital?

Yes

No

If No what do you think is the reason?

2.2 – Is there a special pharmacy in your hospital?

Yes

No

If yes, are drugs and supplies always available in the hospital?

Yes

No

If No what do you think is the reason?

### **3 - PROVISION OF INFORMATION**

3.1 – Do you think health professionals/workers provide the clients with adequate and relevant information about their health problems and other procedures at OPD level?

Yes

No

If No, why not, what do you think could be the reason?

### **4 - HEALTH FACILITY COMFORT AND CLEANLINESS**

4.1 – Can you please explain about the comfort and cleanliness of the

- Waiting rooms,
- and examination rooms?

### **5 – PROBLEMS IN RELATION TO THE HEALTH SERVICE DELIVERY**

5.1– What are the major problems that you think contribute to the dissatisfaction of clients?

Please mention some in sequence of their importance

### **6 - CLIENTS REACTIONS/OPINIONS**

6.1 – How do you accommodate clients' dissatisfactions?

### **7 - MEASURES AND IMPROVEMENTS**

7.1- Is/Was there a measure taken to make changes in the provision of the health service delivery in the OPD of the hospital?

Yes

No

If yes, what was the measure/s and what were the changes

- In the Registration room (waiting time (timely), courtesy and respect)
- In the Examination room (queue process, waiting time, Privacy, confidentiality courtesy and time spend for exam )
- In Pharmacy (Availability of basic drugs and supplies always, Provision of adequate information about the use of drugs and supplies )
- In Laboratory (waiting time both during providing specimen and in receiving results, availability of basic lab tests)
- In x – ray (waiting time to be x – rayed and receive results, availability of basic x-ray procedures).

## **8 - OPINION**

8.1 – What do you think should be done to improve the health service delivery in the hospital in particular in the OPD of the hospital?

## **Annex 4**

### **PART FOUR: - FOCUS GROUP DISCUSSION**

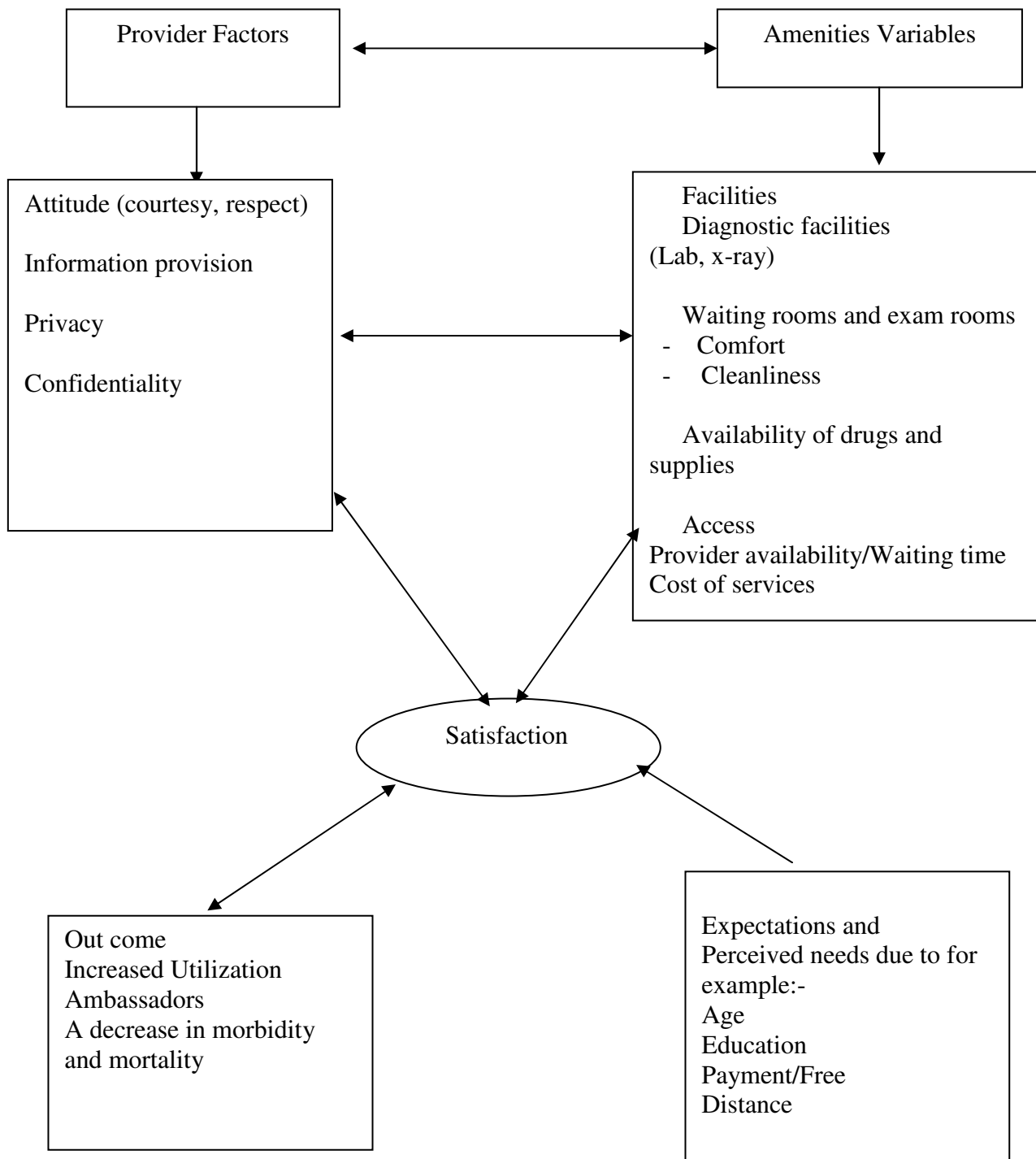
#### **Questions for Focus Group Discussion**

Focus Group discussion for the clients in the OPD of the hospitals

- 1 - How is the courtesy and respect by the Dr/health workers and the registration room workers?
- 2 - Can you please tell me about the provision of information of the services of the opd (eg, in locating rooms for registration, examination rooms, lab. And drug dispensing)
- 3 - Would you please tell me about the time spent and completeness of the physical examination and privacy by the Dr/ health workers?
- 4 - Do you get full laboratory and x ray services in the hospital?
- 5 - Do you get the prescribed drugs and supplies in the hospital?
- 6 - Can you please tell me about the waiting time to get the services in the opd of the hospital?
- 7- What are the major factors that you think contribute to the dissatisfaction of clients?
- 8 - What is your suggestion in order to improve the services in the opd of the hospitals?

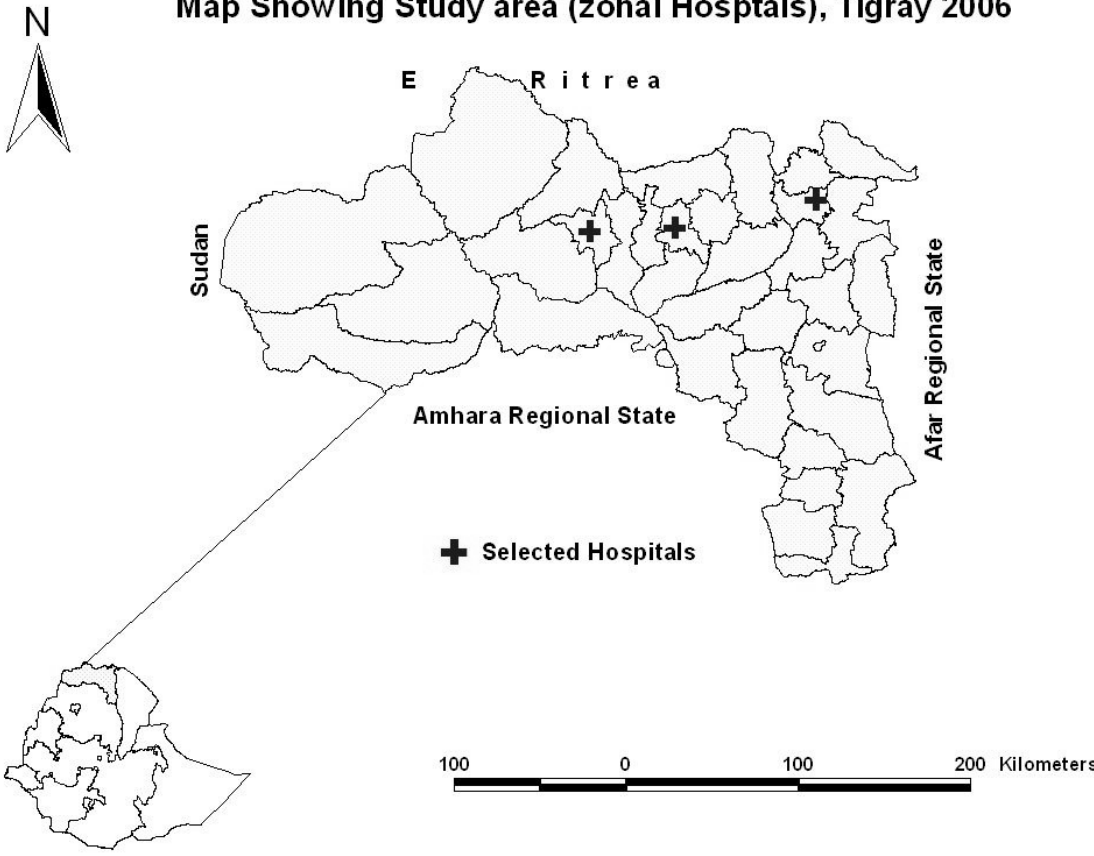
ANNEX 5

Conceptual Frame Work For the study



Annex 6

Map Showing Study area (zonal Hospitals), Tigray 2006



## Annex 7 – Logistic regression result

Comparison of client satisfaction with the availability of drugs on outpatient services by socio demographic characteristics in 3 zonal hospitals, Tigray, 2006

	N <sup>o</sup>	%	Crude OR 95% CI	Adjusted OR 95% CI
<b>Sex</b>				
Male	217	52.6	1.00	
Female	189	47.4	0.781 (0.514- 1.187)	1.048 (0.615- 1.786)
<b>Age</b>				
15 – 24	99	24.38	1.00	
25 – 34	112	27.58	1.367(0.0773 – 2.418)	1.893 (0.953- 3.760)
35 - 44	96	23.64	0.903(0.490 – 1.665)	1.283(0.609 – 2.703)
45 <sup>+</sup>	99	24.38	0.954(0.522 – 1.744)	1.054 (0.490- 2.267)
<b>Educational Status</b>				
Illiterate	171	40.5	1.00	
1 – 6	111	26.3	0.942 (0.557-1.592)	0.934 (0.497- 1.754)
7 – 12	112	26.5	0.932 (0.554- 1.567)	0.983 (0.468- 2.065)
Diploma and above	28	6.6	1.413 (0.614- 3.253)	1.769 (0.514- 6.091)
<b>Address</b>				
Urban	231	54.7	1.00	
Rural	191	45.3	1.343 (0.885- 2.036)	1.203 (0.609- 2.379)
<b>Payment status</b>				
Paying	280	66.4	1.00	
Free	142	33.6	0.085 (0.041- 0.174)*	<b>0.075 (0.035- 0.161)*</b>

Statistically significant = \*

Comparison of client satisfaction with the information provision on outpatient services by socio demographic characteristics in 3 zonal hospitals, Tigray, 2006

	N <sup>o</sup>	%	Crude OR 95% CI	Adjusted OR 95% CI
<b>Sex</b>				
Male	222	52.6	1.00	
Female	200	47.4	0.976 (0.665 - 1.432)	1.182 (0.592- 2.359)
<b>Age</b>				
15 – 24	99	24.38	1.00	
25 – 34	112	27.58	0.735(0.0426 – 1.266)	1.449 (0.690- 3.040)
35 - 44	96	23.64	0.532(0.303 – 0.935)	1.306(0.601 – 2.839)
45 <sup>+</sup>	99	24.38	0.306(0.173 – 0.543)	1.734 (0.764- 3.934)
<b>Educational Status</b>				
Illiterate	171	40.5	1.00	
1 – 6	111	26.3	9.400 (5.362-16.418)	<b>10.416 (5.671- 19.133)*</b>
7 – 12	112	26.5	32.900 (16.589- 65.250)	<b>43.492 (18.764- 101.026)*</b>
Diploma and above	28	6.6	21.620 (7.609- 61.433)	<b>42.012 (11.319- 155.939)*</b>
<b>Address</b>				
Urban	231	54.7	1.00	
Rural	191	45.3	0.322 (0.216- 0.479)	0.903 (0.437- 1.867)
<b>Occupation</b>				
Government employee	41	9.7	1	
Merchant	30	7.1	0.966 (0.344 – 2.706)	3.096 (0.855 – 11.210)
Farmer	159	37.7	0.219 (0.104 – 0.462)	2.299(0.737 – 7.177)
Jobless	126	29.9	0.589 (0.275 – 1.260)	3.188 (1.147 – 8.859)
Others	66	15.6	0.952 (0.405 – 2.234)	2.579 (0.874 – 7.614)
<b>Frequency of visit</b>				
New	261	61.8	1	
Repeat	161	38.2	1.183(0.797 – 1.756)	0.850 (0.456 – 1.585)

Statistically significant = \*

Comparison of client satisfaction with the waiting time on outpatient services by socio demographic characteristics in 3 zonal hospitals, Tigray, 2006

	N <sup>o</sup>	%	Crude OR 95% CI	Adjusted OR 95% CI
<b>Sex</b>				
Male	222	52.6	1.00	
Female	200	47.4	0.449 (0.204 - 0.991)*	0,589(0.258 – 1.345)
<b>Age</b>				
15 – 24	99	24.38	1.00	
25 – 34	112	27.58	1.417(0.0.563 – 3.567)	1,477(0.570 – 3.676)
35 - 44	96	23.64	1.814(0.644 – 5.107)	1.728(0.600 – 4.974)
45 <sup>+</sup>	99	24.38	3.783(1.023 – 13.989)*	3.216(0.854 – 12.112)
<b>Educational Status</b>				
Illiterate	171	40.5	1.00	
1 – 6	111	26.3	0.972 (0.33 -2.811)	1.075(0.340 – 3.397)
7 – 12	112	26.5	0.567 (0.223 - 1.442)	0.968(0.310 – 3.019)
Diploma and above	28	6.6	0.333 (0.095 - 1.167)	0.538 (0.102 – 2.834)
<b>Address</b>				
Urban	231	54.7	1.00	
Rural	191	45.3	1.917 (0.852- 4.314)	0.904(0.206 – 1.156)
<b>Payment status</b>				
<b>Paying</b>	280	66.4	1.00	
<b>Free</b>	142	33.6	0.446(0.209 – 0.951)	<b>0.488 (0.206 – 0.978)*</b>
<b>Frequency of visit</b>				
New	261	61.8	1	
Repeat	161	38.2	1.183(0.797 – 1.756)*	0.850(0.456 – 1.585)

Statistically significant = \*

Comparison of client satisfaction with courtesy and respect on outpatient services by socio demographic characteristics in 3 zonal hospitals, Tigray, 2006

	N <sup>o</sup>	%	Crude OR 95% CI	Adjusted OR 95% CI
<b>Sex</b>				
Male	222	52.6	1.00	
Female	200	47.4	2.118 (0.900 - 4.983)	1.574 (0.572 – 4.333)
<b>Age</b>				
15 – 24	105	24.8	1.00	
25 – 34	118	27.96	0.104(0.0.13 – 0.826)*	<b>0.103(0.013 – 0.822)*</b>
35 - 44	99	23.45	0.181(0.021 – 1.576)	0.204(0.023 – 1.791)
45 <sup>+</sup>	100	23.69	0.087(0.011 – 0.689)*	<b>0.110(0.014 – 0.891)*</b>
<b>Educational Status</b>				
Illiterate	171	40.5	1.00	
1 – 6	111	26.3	1.059 (0.424 -2.645)	1.069(0.376 – 3.037)
7 – 12	112	26.5	2.221 (0.705- 6.995)	0.980(0.230 – 4.185)
Diploma and above	28	6.6	2.221 (0.279- 17.684)	1.512(0.104 – 22.052)
<b>Occupation</b>				
Gov. employee	41	9.71	1.00	
Merchant	29	7	0.462(0.072 – 2.951)	0.790(0.089 – 7.042)
Farmer	159	37.7	0.492(0.108 – 2.245)	1.014(0.144 – 9.009)
Jobless	126	29.9	1.564(0.276 – 8.868)	1.218(0.156 – 9.510)
Others	66	15.6	1.641(0.222 – 12.124)	1.620(0.174 – 15.089)
<b>Address</b>				
Urban	231	54.7	1.00	
Rural	191	45.3	<b>0.415 (0.181- 0.953)*</b>	0.462 (0.193 – 1.108)
<b>Payment status</b>				
<b>Paying</b>	280	66.4	1.00	
<b>Free</b>	142	33.6	2.222(0.820 – 6.021)	1.620(0.174 – 15.089)

Statistically significant = \*

Annex 8 - Questionnaire for clients (Tigrigna Version)