



**ST. MARY'S UNIVERSITY
SCHOOL OF GRADUATE STUDIES**

**SERVICE QUALITY ASSESSMENT ON THE SELECTED ART SERVICE -
PROVIDER HEALTH FACILITIES**

**BY
MESERET TESHAYE**

**JUNE, 2017
ADDIS ABABA, ETHIOPIA**

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**BY
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ID NO. SGS/0666/2007A**

**A THESIS SUBMITTED TO ST. MARY'S
UNIVERSITY, SCHOOL OF GRADUATE STUDIES IN
PARTIAL FULLFILMENT OF THE REQUIREMENTS FOR
THE DEGREE OF MASTER OF PROJECT MANAGEMENT**

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APPROVED BY BOARD OF EXAMINERS

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Declaration

I, the under signed declare that this thesis is my original work, prepared under the guidance of Temesgen Belayneh (PhD). All sources of materials used for the thesis have been duly acknowledged. I further confirm that the thesis has not been submitted either in part or in full to any other higher learning institution for the purpose of earning any degree.

Meseret Tesfaye

St.Mary's university, Addis Ababa

Signature

June, 2017

ENDORSEMENT

This thesis has been submitted to St. Mary's University, school of Graduate Studies for examination with my approval as a university advisor

Advisor

St. Mary University, Addis Ababa

Signature

June, 2017

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ACKNOWLEDGMENT

First of all I would like to thank the almighty God. I would like to thank also my advisor Dr. Temesigen Belayneh for his ideal advices plus creating strong working environment. I would also expand my honor for the staffs, patients and stakeholders of the three selected hospitals such as Zewiditu, Tikur Anbesa and Alert for their active participation during the study. Finally I would like to acknowledge again the valuable assistance of my husband, family and colleagues for their helpful feedback as well as support.

Thank you all!!!

Abbreviations /Acronyms

AIDS	Acquired Immune Deficiency Syndrome
ART	Anti-retroviral Therapy
ARV	Antiretroviral
CD4	T-lymphocyte cell bearing CD4 receptor CDC United States
HAART	HIGHLY ACTIVE ART
HF	Health Facility
HIV	Human Immuno-deficiency Virus
MOH	Ministry of Health, Ethiopia
NEP+	Network of Networks HIV positives in Ethiopia
PLWHAs	People Living With HIV/AIDS
SERVQUAL	Service quality model
SPSS	Statistical package for social Science
SQ	Service quality
UNAIDS	United Nations Programme on HIV/AIDS
WHO	World Health Organization

ABSTRACT

Ethiopia is a poor country with weak health care systems and infrastructure, so assessing the service quality in health facility is paramount. This study explores and assesses how the service quality in the three top ranked ART-services providers' health facility based on case load such as Zewditu, Black lion and Alert looks like or perceived. Different groups of respondent were considered to have a holistic view. The assessment was conducted based on the patients, service providers and stakeholder's perspective. The research was conducted by using SERVQUAL model. A modified SERVQUAL model was used to assess the service quality of each health facilities. A structured questionnaire derived from SERVQUAL models with a five point likert scale was developed and distributed to the three hospital patients, service providers and significant stakeholders. The questionnaires were distributed for 216 patients, 35 service providers and 27 stakeholders based on random sampling techniques. The required data were collected back from 174 patients, 35 service providers and 27 stakeholders, there for the return rate of the response of service providers and stakeholders is 100% where as the patient is 80%. A descriptive statistical analysis based on SPSS and excel was conducted to analyzed the result and the study shows that the service quality assessment of all selected health facilities based on the five service quality dimensions majorly concentrated in normal service quality. The service quality in each health facilities was not sound enough to satisfy the customers. Moreover, there were also offsets in some service quality dimensions from the normal like the empathy related service in alert was very poor. In conclusion from the findings of the analysis all the three selected health facilities should improve their service quality from the usual normal to good or excellent level by focusing on the customers values.

Key words: service quality dimensions, ART, SERVQUAL and health facility

CHAPTER ONE: INTRODUCTION

1.1 Background of the Study

Service quality now a day's becomes a key part for global competitiveness. There for organizations providing services for their customers must measure their services and improve the quality of the services to satisfy their customers and ultimately meet the purpose of the organization. However, measuring and analyzing quality is most of the time associated with product Manufacture Company. The main reason for this thought is the quality concept originated primarily in the manufacturing sector, but currently the quality concept gets attention in service sector too. There for the health care as a service sector must concerns about the quality of their service. Unlike to the other services sector theses sector even must give a serious attention for the quality of the service because they are responsible for human life (Pai.P & T., 2012).

Assessing the quality and improving its services should be given considerable emphases, but defining and measuring the quality of service has been a major challenge in service sector in general and healthcare industry in particular (Amjeriya & Malviya, 2012). Different researchers use the most important service quality measurement scale (SERVQUAL) to measure quality of service in a hospital service environment(BELAID, BOUCHENAF, BARICH, KARIMA, & MAAZOUZI, 2015). Although this model is an effective approach different researchers modifying it and customize in different situations.

The service quality model "SERVQUAL" ranks as the most important of these models. It is based on the assumption that service quality is a function of differences (gaps) between customers' expectations and perceptions along five quality dimensions: reliability, responsiveness, tangibles, assurance and empathy. In addition, favorable customer perception of service quality will have a positive relationship with overall customer satisfaction and in turn their behavioral intention(BELAID et al., 2015).

The five dimensions of service quality such as reliability, responsiveness, assurance, empathy, and tangibles that link specific service characteristics to consumer's expectations. (a) Tangibles-physical facilities, equipment and appearance of personnel; (b) Empathy- caring, individualized attention; (c) Assurance- knowledge and courtesy of employees and their ability to convey trust and confidence; (d) Reliability- ability to perform the promised service dependably and accurately; and (e) Responsiveness-

willingness to help customers and provide prompt service also considered as service quality assessment model(Umath, Marwah, & Soni, 2015).

The service quality measurement scale (SERVQUAL) is used in research to measure quality of service in a hospital service environment. The following key dimensions are used to assess the service quality of the hospital such as reliability, responsiveness, assurance, empathy, tangibles, competence, access, courtesy, communication, credibility, security and understanding /knowing the patient. The SERVQUAL instrument consists of 42 statements for assessing consumer perceptions and expectations regarding the quality of a service are used to assess the service quality (Amjeriya & Malviya, 2012).

The other proposes a conceptual model to measure the patient perceived service quality in healthcare contains 10 dimensions and is based on existing literature in healthcare services; and helps in improving our knowledge to identify the components that are important and can influence quality. The dimensions of patient perceived Hospital Service Quality(HSQ) are: Physical Environment and Infrastructure, Personnel Quality, Image, Trustworthiness, Support, Process of Clinical Care, Communication, Relationship, Personalization and Administrative Procedures(Pai.P & T., 2012).

SERVPERF has been identified as being superior in explaining variance in overall measure of service quality. Studies conducted reveals that SERVPERF has been identified as being superior in explaining variance in overall measure of service quality. The argument is that the relative usage of SERVQUAL or SERVPERF is industry specific. Expectations part associated with the measurement of SERVQUAL is multi-dimensional According to (K.P.M & Y.Srinivasulu, 2014)

Generally In the healthcare literature, several conceptual frameworks for evaluating the quality of care have been proposed. In the traditional medical approach, the primary focuses of health care centre on increasing the probability of desirable healthcare outcomes. Although the application of SERVQUAL mode in assessing service quality is most common the number of quality dimensions varies from researcher to researcher. A research conducted in Singapore, Malaysia, Jordan, Iran and Thailand considers 10 dimensions, that is, the original SERVQUAL, to seven. In some researches also 'accessibility' 'affordability' 'medical services' and 'professionalism' proposed as additional dimensions(Thawesaengskulthai, Wongrukmit, & Dahlgaard, 2015).

Finally although there are different methods for assessing services quality among these SERVQUAL is most used models in this regard with minor adjustment with the criteria's. There for this research considered the most commons 5 dimensions of service quality: responsiveness, assurance, reliability, empathy and tangibility and modified the criteria's in to 45 components based on the available literature. But in this particular context this model is use as an assessment of the service quality from different perspective rather than used as the gap analyzer model which consider only customers.

1.2 Statement of the problem

Health care services are limited and poor quality moreover; Ethiopia has extremely poor health status relative to other low-income countries. To solve this problem, the government has focused on improving the organization and quality of health services delivered to the population. This is because improving the poor quality of care delivered to patients is one of the strategies to reduce the burden of communicable diseases and plays a significant role in attaining the Millennium Development Goals (MDGs) (Birhanu, Assefa, Woldie, & Morankar, 2010). According to (Chaya, 2007) Ethiopia is a poor country with weak health care systems and infrastructure. Almost 80 percent of morbidity in Ethiopia is due to preventable communicable and nutritional diseases, both associated with low socio-economic development. Although the above mentioned diseases are easily curable in the case of HIV positive people they may be a major cause of death. Therefore working on the services quality of ART-services provider's health centers ultimately mitigates this concern. Assessing the existing service quality is important to strengthen the health care system quality of services. The above studies also justified that health facilities are subjected to serious quality problems, there for in order to solve the existing quality problems and providing quality services as per the customer requirement assessing the quality is mandatory thus measuring and improving the service quality of ART providers is critical to enhance ART adherence.

1.3 Basic research question

The following research questions are the basic research question which is going to be addressed.

- Does the service quality of the three selected health facilities according to the customer's requirement
- Is there a service quality assessment system for ART-service providers?
- How the service quality for ART-service providers is assessed?

1.4 Objectives of the study

1.4.1 General objectives

The main objective of the research is to assess the service quality on the three selected ART-services provider health facilities

1.4.2 Specific objectives

- To identify the service quality measurement dimensions for ART service providers.
- To assess the service quality of the selected health centers
- To compare the selected health facilities service quality

1.5 Significance of the study

The research has significant benefits primarily for ART-service provider health facilities. Moreover, this research contributes to the country's effort towards fighting HIV through measuring the quality of ART service providers for further improvement opportunities. Finally, the entire public also shares the advantage, because service which comes from a qualified health center has an impact on health and safety of the public, especially on ART clients. Future researchers as well as the expertise in the area have advantages from this research too.

1.6 Scope of the study

The scope of this study was limited to assess the service quality of three selected ART-service providers' health facilities which are located in Addis Ababa, Ethiopia and particularly focusing on ART-services. Thus, the study assesses Zewiditu, Black Lion and Alert hospitals' service quality from patient, service providers and stakeholder's perspective using SERVQUAL model.

1.7 Organization of the study

This study consists of five distinct chapters. Chapter One presents an introduction which focus on the overview of the service quality and the quality concept in health center; moreover, Statement of problems, objectives of the study, methodology and significance of the study also addressed in this chapter. Chapter two discussed on the review of related literatures specifically focusing on the service quality dimensions and criteria's. Articles and related materials focusing on the service quality assessment were given more considerations. Chapter three focuses on the research methodology, there for a detailed discussion on sampling techniques, data collection and data analysis approaches were considered. Chapter four is the main body of the research which presents the findings and results. Chapter five is the last part of the research summary; conclusion and recommendation are drawn from the whole chapters are discussed here.

CHAPTER TWO: REVIEW OF RELATED LITERATURE

2.1 Introduction

In the previous chapter, the significance of the study as well as the problem statement and objectives of the research were looked at. This chapter explores literatures, written by different authors, on the service quality assessment particularly focusing on health care sector. The purpose of this chapter is to have general perspective on the service quality. In addition, this chapter is used to explore and summarize the related research on health care service, service quality and the conceptual framework. This literature review provided the basis for the design and development of the research instruments and its final analysis.

2.2 Theoretical review

2.2.1 Service concept

Service is a patch up activity to fulfill some one's need in the market. Service is something, which can be experienced but cannot be touched or seen. Services offered by service providers cannot be seen & touched, as they are intangible activities. Some of basic definitions of service as defined by Management Gurus are "A service is any activity or benefit that one party can offer to another which is essentially intangible and does not result in the ownership of anything." By Kotler, Armstrong, Saunders and Wong "Services are economic activities that create value and provide benefits for customers at specific times and places as a result of bringing about a desired change in or on behalf of the recipient of the service." By Christopher Lovelock "Services are the production of essentially intangible benefits and experience, either alone or as part of a tangible product through some form of exchange, with the intention of satisfying the needs, wants and desires of the consumers." By C. Bhatt a chargee the basic difference between service & product is that services are intangible but products are tangible and are required to follow some standardized procedures. Service user can specify about that particular service satisfaction only after availing it for some period of time. Some of the common service areas are retailing, Transportation, Cell phones, education, Health & hospitality Services, BPO and many more

2.2.2 Quality

Quality is perceived differently by different people. Yet, everyone understands what is meant by “quality.” In a manufactured product, the customer as a user recognizes the quality of fit, finish, appearance, function, and performance. The quality of service may be rated based on the degree of satisfaction by the customer receiving the service. The relevant dictionary meaning of quality is “the degree of excellence.” However, this definition is relative in nature. The ultimate test in this evaluation process lies with the consumer. The customer’s needs must be translated into measurable characteristics in a product or service. Once the specifications are developed, ways to measure and monitor the characteristics need to be found. This provides the basis for continuous improvement in the product or service. The ultimate aim is to ensure that the customer will be satisfied to pay for the product or service(Chandrupatla, 2009)

2.2.3 Quality service in health sector

The concept of quality is one of the leading forces in improving health services. The perception of what quality entails differs between countries and sectors because of different value systems. Many definitions are in use, and all may be justified depending on the perspectives and objectives. A common aspect at the centre of the concept of quality is the needs of a client or community. The International Organization for Standardization (ISO) defines quality as “the totality of features and characteristics of an entity that bears on its ability to satisfy a stated or implied need”. In health care, the perception of the needs of a client or community varies with the different views and perspectives of the client, service provider and society and the social, political and economic environment.(WHO, 2004)

The Healthcare service quality characteristics should be recognized mutually by patients and health service providers as both of them have “valuable insight” on features that create quality in hospitals. So, making comparison with customers-oriented focus in Service Quality, it is visible that Healthcare service quality focus is distinctive to some extent as some authors incorporate not only customers’ perception of quality but service providers’ perception as well.. Moreover, even if we understand that service is created for customers, high level quality cannot be achieved without service providers’ involvement in quality comprehension, as service providers are responsible for service delivering while

process of service delivering creates impression on customers. Taking such mutual approach toward service quality will cause necessity to deal with a gap that is discrepancy between customers' and service providers' perception of service quality. It should be remembered that healthcare services as well as general services are existing for customers' satisfaction and even if healthcare service providers have their own essential opinion on healthcare service quality (Globenko & Sianova, 2012)

2.2.4 ART (anti retroviral therapy) service

The advances in the knowledge of human immune deficiency virus (HIV) biology, pathogenesis and therapy, and their dramatic positive consequences on HIV-related morbidity and mortality are quite unique in the history of medicine. Today, antiretroviral (ARV) therapy is potent, convenient and usually well tolerated, capable of reducing HIV blood concentration to undetectable values within a few weeks from treatment initiation and of inducing a robust and sustained CD4 T-cell gain. Despite these unquestioned successes, the problem is far from being solved: even in countries with full access to antiretroviral treatment, life expectancy of people under ARV therapy remains lower with respect to that of uninfected people. Furthermore, large populations of HIV infected individuals are not diagnosed remain untreated or enter treatment at a very late stage of diseases. Undiagnosed and untreated population represents an infected reservoir that increases HIV transmission

2.2.5 Antiretroviral therapy: successes and limits

Antiretroviral drugs are classified according to the step they inhibit in the viral life-cycle. A sub classification may be based on their chemical structure. A milestone in the history of HIV disease has been the availability of new classes of drugs, in 1995-96, allowing the introduction of combination ARV therapy (HAART) and the gradual evolution of HIV infection into a chronic, usually non fatal condition. Up to 2010, more than 20 antiretroviral agents have been licensed, in most cases through an accelerated approval, based not only on clinical efficacy but on their effect on plasma HIV RNA concentration, which is a validated surrogate marker of HIV activity . Despite these impressive results, several questions still wait for an answer and several issues are still under debate. Furthermore, the emergences of new co morbidities that may be partly associated with ARV therapy and partly with HIV itself represent a new problem in medical practice. When is the best time to start antiretroviral therapy? Which is the best ARV combination to start with? How long an individual should be treated with ARV

therapy? These “classic” questions are still open, and they are likely to keep scientists very busy for at least one more decade. (Hardon, 2006). ART are medications that treat HIV. The drugs do not kill or cure the virus. However, when taken in combination they can prevent the growth of the virus. When the virus is slowed down, so is HIV disease. Antiretroviral drugs are referred to as ARV. Combination ARV therapy (cART) is referred to as highly active ART(HAART)(Autran & Carcelain, 1997).

2.2.6 ART in Ethiopia

Human immunodeficiency virus (HIV) infection, a worldwide phenomenon, is a serious public health challenge. HIV infection has globally claimed over 20 million lives, and currently over 34 million people carry the infection. Even though AIDS remains a global pandemic, Ethiopia is one of the highly affected Sub-Saharan countries. Ethiopian Demographic and Health Survey of 2011 indicated an HIV prevalence of 1.5; which differs geographically: urban adult HIV prevalence was 4.2 % while rural adult HIV prevalence was 0.6 %. ANC results also document wide variations among urban settings in different parts of the country(Tessema & Adane, 2015).

Ethiopia’s HIV prevalence rate is approximately 1.2 percent,² equating to about 700,000 HIV-infected people. Since 2005, Ethiopia has been decentralizing free antiretroviral (ART) services from hospitals to health centers as a strategy to improve access to HIV care and treatment. Studies have shown that clients who have positive perceptions of the quality of care they receive, and of the ability of providers and facilities to meet their needs, are more likely to comply with treatment and remain in care. Understanding the role of client satisfaction in patient uptake of HIV services, ENHAT-CS conducted a survey to assess clients’ satisfaction with HIV service delivery at program-supported health centers in the Amhara and Tigray regions of Ethiopia.(USAID, 2012)

HIV is now a chronic illness in patients with continued treatment access and excellent long-term adherence. Huge efforts are ongoing to reproduce these results even in poor and disadvantaged settings. Although the success of therapy is unquestioned, many issues remain. Since cure is not yet possible, treated people have to maintain lifelong adherence and face the risk of delayed drug toxic effects. Furthermore, even when HIV infection is well controlled, chronic low-level viremia and inflammation can persist, along with a higher than expected risk for many complications often associated with ageing. This represents a challenge for many health-care systems, because the amount of resources needed for effective HIV care is likely to increase in the next future. Political leaders should realize that

the epidemic is far from being curbed, rather it is only changing its face(Palmisano & Vella, 2011)

Factors affecting ART adherence

The main factors that contribute to ART adherence among women are increased knowledge levels on adherence, its importance and consequences for not adhering to ART; Short waiting time; good relationships with the next of kin and service providers; trust and effective coping mechanisms to stressful events. On the other factors that contribute to non-adherence are reduced knowledge level; Side effects of ART; bad relationships with service providers and with the next of kin as well as occupation of the clients. (Mbirimtengerenji, Jere, Lengu, & Maluwa, 2013)

2.2.7 Service quality dimensions

Tangibles

Tangibles are about physical facilities, equipment, personnel and communication material. This dimension includes physical facilities, equipment, personnel and communication material and if the personnel appear neat. Service quality can be divided into two parts, functional quality and technical quality. Tangibles can be connected to the functional quality(Yarimoglu, 2014)

Reliability

Reliability is connected to the consistency of performance and dependability, This dimension includes keeping promises, showing a sincere interest in solving problem, give right service the first time, providing the service at the time the company promise to do so and trying to keep an error free record. That means that this dimension can be connected to both technical quality and functional quality. Showing a sincere interest in solving problem is about the manner in which the service is delivered and therefore it is connected to the functional quality. The other features in this dimension can be connected to the technical quality. (Yarimoglu, 2014)

Assurance

Assurance is about competence, courtesy, credibility, and security. Those factors separately; courtesy is about politeness, respect, consideration, friendliness of contact personnel (including receptionists, telephone operators and so on). Competence is connected to the knowledge and skills of contact personnel, operational support personnel (and also research capability) that are needed for delivering the service. Credibility involves factors such as trustworthiness, believability and honesty. It means to the level the company has the customer's best interest at heart. Factors that affect the credibility are the company name, reputation, personal characteristics and the degree to which the hard sell is connected to interactions with customers.(Yarimoglu, 2014)

Responsiveness

This factor concerns to what extent the employees are prepared to provide service. This involves factors such as mailing a transaction slip immediately, calling a customer back in short time and giving prompt service. This dimension touch subjects as information about the service, giving prompt service, employee's willingness to help the customers and that the employees never are to busy to respond to requests from customers. This dimension can be connected to the technical quality because the features are about how the service is delivered.(Yarimoglu, 2014)

Empathy

Empathy is about easy access, good communication and understanding the customer. describes those factors separately. Easy access is connected to the approachability which means for example if the operating hours are convenient, the location of the facilities are convenient, the waiting times are short and also easy access by telephone. Good communication is about keeping the customer informed in a language they can understand and also listen to the customer. The company may have to make some adjustments in order to include foreign customers. Understanding the customer is about making an effort to understand the customer which involves learning about specific requirements, providing individualized attention and recognizing also the regular customer. This dimension include factors such as individual attention, if the company has the best of the customer at their heart, if the employees understand the specific needs of the customers and convenient operating hours. This dimension is clearly connected to the functional quality (Yarimoglu, 2014).

2.2.8 Service quality measurement approaches in health care sector

The institute of medicine (IOM) has defined quality of healthcare as “The degree to which health services for individuals and populations increase the likelihood of desired health outcomes and are consistent with current professional knowledge”. According (Amjeriya & Malviya, 2012) defining and measuring the quality of service has been a major challenge in healthcare industry. The service quality measurement scale (SERVQUAL) is used in research to measure quality of service in a hospital service environment. SERVQUAL as an effective approach has been studied and its role in the analysis of the difference between patient expectations and service providers’ perceptions

Quality of health service features a new advanced service attract users, and characterize the performance of doctors or characterize unit to provide health service to others, such as integrated services; Place wait comfortably; medical record on the computer; hot meals in the inner section; follow-up cases by telephone; instructions and clear and committed by members of the health team; provide some services at home (home follow-up visits). Different researchers forward the tools for assessing the quality of the service offered the following are some of them (BELAID et al., 2015). The service quality model "SERVQUAL" ranks as the most important of these models. It is based on the assumption that service quality is a function of differences (gaps) between customers' expectations and perceptions along five quality dimensions: reliability, responsiveness, tangibles, assurance and empathy. In addition, favorable customer perception of service quality will have a positive relationship with overall customer satisfaction and in turn their behavioral intention (BELAID et al., 2015)

The following identified five dimensions of service quality such as reliability, responsiveness, assurance, empathy, and tangibles that link specific service characteristics to consumer’s expectations. (a) Tangibles-physical facilities, equipment and appearance of personnel; (b) Empathy- caring, individualized attention; (c) Assurance- knowledge and courtesy of employees and their ability to convey trust and confidence; (d) Reliability- ability to perform the promised service dependably and accurately; and (e) Responsiveness-willingness to help customers and provide prompt service are used to assess service quality (Umath et al., 2015).

The service quality measurement scale (SERVQUAL) is used in research to measure quality of service in a hospital service environment. The following key dimensions are used to assess the service quality of the hospital such as reliability, responsiveness, assurance, empathy, tangibles, competence, access,

courtesy , communication , credibility , security and understanding /knowing the patient . The SERVQUAL instrument consists of 42 statements for assessing consumer perceptions and expectations regarding the quality of a service are used to assess the service quality(Amjeriya & Malviya, 2012).

A conceptual model proposes to measure the patient perceived service quality in healthcare contains 10 dimensions and is based on existing literature in healthcare services; and helps in improving our knowledge to identify the components that are important and can influence quality. The dimensions of patient perceived Hospital Service Quality(HSQ) are: Physical Environment and Infrastructure, Personnel Quality, Image, Trustworthiness, .Support, Process of Clinical Care, Communication, Relationship, Personalization and Administrative Procedures(Pai.P & T., 2012)

SERVPERF has been identified as being superior in explaining variance in overall measure of service quality. Studies conducted reveals that SERVPERF has been identified as being superior in explaining variance in overall measure of service quality. The argument is that the relative usage of SERVQUAL or SERVPERF is industry specific. Expectations part associated with the measurement of SERVQUAL is multi-dimensional(K.P.M & Y.Srinivasulu, 2014). In the healthcare literature, several conceptual frameworks for evaluating the quality of care have been proposed. In the traditional medical approach, the primary focuses of health care centre on increasing the probability of desirable healthcare outcomes. Although the application of SERVQUAL mode in assessing service quality is most common the number of quality dimensions varies from researcher to researcher. A research conducted in Singapore, Malaysia, Jordan, Iran and Thailand reduced the 10 dimensions, that is, the original SERVQUAL, to seven. In some researches also ‘accessibility’ ‘affordability’ ‘medical services’ and ‘professionalism’ proposed as additional dimensions(Thawesaengkulthai et al., 2015).

The research on the title of service quality in the public service considers the following service quality dimensions Tangibles, Reliability, Responsiveness, Assurance and Empathy. Each of the above mentioned dimensions further cascaded in the following criteria's. Tangibles criteria's are up-to-date equipment, Physical facilities are visually appealing, well dressed and neat in appearance and visually appealing materials associated with the service. Reliability criteria's are sincere interest in solving problems, Performs the service right the first time, Provides services at the time promised and Maintains error-free records. Responsiveness criteria's are Inform customers when services will be performed, Offers prompt services to customers, always willing to help customers and readily respond to customers' request. Assurance criteria's are able to instill confidence in customers, Customers feel safe in their transactions, and employees are courteous at all times and have the knowledge to answer customers' questions. Finally empathy criteria's are have convenient operating hours to all, employees given personal attention to all, employees have customers best interests at heart and employees understanding customers' needs(Ramseook-Munhurrun, n, & Naidoo, 2010)

Table 1-Service quality dimensions and criteria (a)

<i>R.N</i>	<i>Author</i>	<i>Title</i>	<i>Area</i>	<i>Dimensions</i>	<i>Criteria's</i>
1	(Ramseook-Munhurrun et al., 2010)	service quality in the public service		Tangibles	up-to-date equipment, Physical facilities are visually appealing, well dressed and neat in appearance, Visually appealing materials associated with the service
				Reliability	sincere interest in solving problems, Performs the service right the first time, Provides services at the time promised, Maintains error-free records
				Responsiveness	Inform customers when services will be performed, Offers prompt services to customers, Always willing to help customers, Readily respond to customers' request
				Assurance	Able to instill confidence in customers, Customers feel safe in their transactions, Employees are courteous at all times, Have the knowledge to answer customers' questions
				Empathy	Have convenient operating hours to all, Employees given personal attention to all, Employees have customers best interests at heart ,Employees understanding customers' needs

The research on the title of Health Service Delivery in the Western Cape: A Measurement of Perceptions considers the following service quality dimensions Tangibles, Reliability, Responsiveness, Assurance and Empathy. Each of the above mentioned dimensions further cascaded in the following criteria's. Tangibles criteria's is Physical appearance. Reliability criterion is Performing ability the promised service in a dependable and accurate manner. Responsiveness criterion is willingness of employees. Assurance criteria's are able to instill confidence in customers, Customers feel safe in their transactions, and employees are courteous at all times and have the knowledge to answer customers' questions. Finally empathy criteria's are have convenient operating hours to all, employees given personal attention to all, employees have customers best interests at heart and employees understanding customers' needs(Whitford, 2016)

Table 2-Service quality dimensions and criteria (b)

<i>R.N</i>	<i>Author</i>	<i>Title</i>	<i>Area</i>	<i>Dimensions</i>	<i>Criteria's</i>
2	(Whitford, 2016)	Health Service Delivery in the Western Cape: A	Hospital	Tangibles	physical appearance,
				Reliability	Performing ability the promised service in a dependable and accurate manner.
				Responsiveness	willingness of employees
				Assurance	Knowledge and courtesy and ability to convey trust and confidence.
				Empathy	caring and individualized attention

The research on the title of Service quality in healthcare establishments: A Measurement of Perceptions considers the following service quality dimensions Tangibles, Reliability, Responsiveness, Assurance and Empathy. Each of the above mentioned dimensions further cascaded in the following criteria's. Tangibles criteria's is Physical evidence in a service facility (e.g., personnel, equipment, etc.). Reliability criterion is ability to provide services accurately and dependably. Responsiveness criterion is readiness or quickness in responding to customers' needs. Assurance criteria's are courtesy and knowledge of the employees and their ability to convey trust and confidence. Finally empathy criteria's are caring and individualized attention (Talib, Azam, & Rahman, 2015)

Table 3-Service quality dimensions and criteria (c)

<i>R.N</i>	<i>Author</i>	<i>Title</i>	<i>Area</i>	<i>Dimensions</i>	<i>Criteria's</i>
3	(Whitford, 2016)	Service quality in healthcare	Hospital	tangibles	Physical evidence in a service facility (e.g., personnel, equipment, etc.)
				reliability	ability to provide services accurately and dependably
				responsiveness	readiness or quickness in responding to customers' needs
				assurance	courtesy and knowledge of the employees and their ability to convey trust and confidence
				empathy	caring and individualized attention

The research on the title of Balancing Consumer Perceptions and Expectations: A Measurement of Perceptions considers the following service quality dimensions Tangibles, Reliability, Responsiveness, Assurance and Empathy. Each of the above mentioned dimensions further cascaded in the following criteria's. Tangibles criteria's modern-looking, facility visually appealing, neat-appearing and material visually appealing. Reliability criterion is Promise to do something by a certain time, problem solving service; perform the service right the first time, service at the time they promise to do so. Responsiveness criterion is Employees will tell customers exactly when the service will be performed, Employees will give prompt service to consumers, will always be willing to help consumers, Employees will never be too busy to respond to consumer's requests. Assurance criteria's are Trust building, confidentiality, consistently courteous, knowledge full. Finally empathy criteria's are companies will give customers individual attention, operating hours convenient to all their customers ,employees who give customers personal attention, best interest at heart , understand the specific needs of their customers (Talib et al., 2015)

Table 4-Service quality dimensions and criteria (d)

<i>R.N</i>	<i>Author</i>	<i>Title</i>	<i>Area</i>	<i>Dimensions</i>	<i>Criteria's</i>
4	(Zeithaml et al., 1990)	Balancing Consumer Perceptions and Expectations establishments Western Cape: A Measurement of Perceptions	Hospital	Tangibles	modern-looking ,facility visually appealing ,neat-appearing and material visually appealing
				Reliability	Promise to do something by a certain time, problem solving service; perform the service right the first time, service at the time they promise to do so.
				Responsiveness	Employees will tell customers exactly when the service will be performed, Employees will give prompt service to consumers, will always be willing to help consumers, Employees will never be too busy to respond to consumer's requests
				Assurance	Trust building ,confidentiality ,consistently courteous, knowledge full
				Empathy	companies will give customers individual attention, operating hours convenient to all their customers ,employees who give customers personal attention ,best interest at heart , understand the specific needs of their customers

The research on the title of Assessment of service quality dimensions in healthcare industry “A Comparative study on patient’s satisfaction with Mayiladuthurai Taluk Government vs. Private Hospitals: A Measurement of Perceptions considers the following service quality dimensions Credibility, Security, Access, Communication , Understanding the customer, Tangibles ,Reliability, Responsiveness, Competence, and Courtesy . Each of the above mentioned dimensions further cascaded in the following criteria’s. Credibility criteria’s Trustworthiness, believability and honesty of the service provider. Security criterion is Promise Freedom from danger and risk, or doubt. Access criteria’s are Trust Approachability and ease of contact. Communication criteria’s are listening to customers and keeping them informed in language they can understand. Understanding the customer. Tangibles Appearance of physical facilities, equipment, personnel, and communication materials. Reliability criteria’s are Ability to perform the promised service dependably and accurately. Responsiveness criteria’s are Willingness to help customers and provide prompt service. Competence Possession of the skills and knowledge required to perform the service. Finally Courtesy criteria’s are Politeness, respect, consideration, and friendliness of contact personnel. (Raj, Karpagam, & Rajakrishnan)

Table 5-Service quality dimensions and criteria (e)

<i>R.N</i>	<i>Author</i>	<i>Title</i>	<i>Area</i>	<i>Dimensions</i>	<i>Criteria's</i>
5	(Raj et al.)	Assessment of service quality dimensions in healthcare industry	Hospitals	Credibility	Trustworthiness, believability, honesty of the service provider
				Security	Freedom from danger, risk, or doubt.
				Access	Approachability and ease of contact
				Communication	Listening to customers and keeping them informed in language they can understand.
				Understanding the customer	Making the effort to know customers and their needs.
				Tangibles	Appearance of physical facilities, equipment, personnel, and communication materials.
				Reliability	Ability to perform the promised service dependably and accurately.
				Responsiveness	Willingness to help customers and provide prompt service.
				Competence	Possession of the skills and knowledge required to perform the service.
				Courtesy	Politeness, respect, consideration, and friendliness of contact personnel.

The research on the title of Service Quality And Determinants Of Customer Satisfaction In Hospitals: Turkish Experience considers the following service quality dimensions Tangibles, Reliability, Responsiveness, Assurance ,Empathy and Courtesy. Each of the above mentioned dimensions further cascaded in the following criteria's. Tangibles criteria's technology, physical facilities, personnel, and communication material etc. Reliability criteria's are the willingness to help customers and provide prompt service.. Responsiveness criteria's are the willingness to help customers and provide prompt service. Assurance criteria's are Knowledge of employees and their ability to inspire trust and confidence. Empathy criteria's are Caring and individualized attention the firm provides its customer. Finally Courtesy the kind behavior of employees to the customer.

(Zaim, Bayyurt, & Zaim, 2010)

Table 6-Service quality dimensions and criteria (f)

R. N	Author	Title	Area	Dimensions	Criteria's
6	(Zaim et al., 2010)	Service Quality And Determinants Of Customer Satisfaction	Hospital	Tangibles	technology, physical facilities, personnel, and communication material etc
				Reliability ,	Ability to perform the promised service dependably and accurately.
				Responsive ness	the willingness to help customers and provide prompt service.
				Assurance	Knowledge of employees and their ability to inspire trust and confidence.
				Empathy	Caring and individualized attention the firm provides its customer
				Courtesy	The kind behavior of employees to the customer.

The research on the title of Assessment of Measurement Of Service Quality In Healthcare Organization A Measurement of Perceptions considers the following service quality dimensions Reliability , Responsiveness , Assurance , Empathy , Tangibles , Competence, Access ,Courtesy ,Communication, Credibility, Security, and Understanding /Knowing the patient . Each of the above mentioned dimensions further cascaded in the following criteria's. Reliability Speed of Service, Speed of registration and Accuracy of treatment Responsiveness criteria's are Speed of response to complaints , Concern to patient and Desire for helping .Assurance criteria's are Doctor concern to patients , Nurse attitude to patients and Room security. Empathy criteria's are Ease of communication and Attention and patience of the nurses . Tangibles criteria's are Availability of medical devices , Cleanliness and tranquility of patient room , Choices of menu and potion , Furniture are present in patient room , Electricity available for emergency , Pathology lab and Employee performance. Competence criteria's are Doctors qualification , Qualification of staff in hospital , Experience of doctors and Reputation of doctors. Access criteria's are No. of hours doctors sitting in the chamber and No. of rounds taken/day/week. . Courtesy criteria's are Politeness of the staff to patient and Behavior of the staff and doctors. Communication criteria's are Counseling facility , Communication and ITC , Computerized registration facility , Computerized billing facility and Computerized dispensary. Credibility criteria's are Trustworthiness, Doctors faith and Belief . Security criteria's are Alarm provided for danger, Fire proof arrangement, Accidental facility and General safety .Finally Understanding /knowing criteria's are the patient To know what

type of diseases patient suffering from and What type of problem arises to patient. (Amjeriya & Malviya, 2012)

Table 7-Service quality dimensions and criteria (g)

<i>R. N</i>	<i>Author</i>	<i>Title</i>	<i>Area</i>	<i>Dimensions</i>	<i>Criteria's</i>
7	(Amjeriya & Malviya, 2012)	Assessment of service quality dimensions in healthcare industry	Hospital	Reliability	Speed of Service , Speed of registration and Accuracy of treatment
				Responsiveness	Speed of response to complaints , Concern to patient and Desire for helping
				Assurance	Doctor concern to patients , Nurse attitude to patients and Room security
				Empathy	Ease of communication and Attention and patience of the nurses
				Tangibles	Availability of medical devices , Cleanliness and tranquility of patient room , Choices of menu and portion , Furniture are present in patient room , Electricity available for emergency , Pathology lab and Employee performance
				Competence	Doctors qualification , Qualification of staff in hospital , Experience of doctors and Reputation of doctors
				Access	No. of hours doctors sitting in the chamber and No. of rounds taken/day/week
				Courtesy	Politeness of the staff to patient and Behavior of the staff and doctors
				Communication	Counseling facility , Communication and ITC , Computerized registration facility , Computerized billing facility and Computerized dispensary
				Credibility	Trustworthiness , Doctors faith and Belief
				Security	Alarm provided for danger , Fire proof arrangement , Accidental facility and General safety
Understanding /Knowing the patient	To know what type of diseases patient suffering from and What type of problem arises to patient				

The research on the title of Service quality measurement in health care system –A study in select hospitals in Salem city Tamilnadu considers the following service quality dimensions Tangibles, Reliability, Responsiveness, Assurance ,Empathy and Courtesy. Each of the above mentioned dimensions further cascaded in the following criteria's. Tangibles criteria's Modern looking equipment ,physical facilities visually appealing , personnel's neatness in appearance , material physically appealing . Reliability criteria's are Keep appointment day , problem solving ,loyal,

on time service delivery ,work with minimum mistake. Responsiveness criteria's are Exact information delivered , fast response, willingness, never to be busy to respond penitents request. Assurance criteria's are Trust building with personnel, trust building with organization, personnel politeness, skilled personnel. Finally empathy criteria's are Individual attention, service delivery convenient time, penitents interest focused service ,specific need of penitent ,informing and listen penitents (R.Kavitha, 2012)

Table 8-Service quality dimensions and criteria (h)

R. N	Author	Title	Area	Dimensions	Criteria's
8	(R.Kavitha, 2012)	Service quality measurement in health care system	Hospital	Tangibles	Modern looking equipment ,physical facilities visually appealing , personnel's neatness in appearance , material physically appealing
				Reliability	Keep appointment day ,problem solving ,loyal, on time service delivery ,work with minimum mistake
				Responsiveness	Exact information delivered , fast response, willingness, never to be busy to respond penitents request
				Assurance	Trust building with personnel, trust building with organization ,personnel politeness, skilled personnel
				Empathy	Individual attention , service delivery convenient time ,penitents interest focused service ,specific need of penitent ,informing and listen penitents

The research on the title of A proposed framework for service quality dimensions in health sector considers the following service quality dimensions; Reference group infrastructure, Staff quality, Cost, Cleanliness and hygiene and Waiting Time. Each of the above mentioned dimensions further cascaded in the following criteria's. Infrastructure criteria's are overall look and location of hospital, Availability of medical equipments. , Availability of certain important diagnostic test facilities such as EEG,ECG,ULTRASOUND,CT SCAN etc . Cost criteria's are Affordable cost of tests like EEG, ECG, CT SCAN, MRI, SUNOGRAPHY, ULTRASOUND etc., Cheap food charges and Affordable accommodation charges. Cleanliness and hygiene criteria's are Cleanliness and comfort well-ventilated, with minimal noise level) of your wardroom and toilet, Timely and hygienic food supplied to wards and rooms, Overall hygiene and cleanliness in the hospital ,Good housekeeping facilities and Infection-free environment / treatment provided by

the hospital during your stay . Finally Waiting Time criteria's are Time taken to get appointment with the doctor, Adequate space for waiting in the waiting room, Reasonable time interval between patient arrival and consultation with the doctor is reasonable, Availability of entertaining equipments in the waiting room to avoid boredom, Waiting time for test results. (Ather Sidiq Zarger & M.F.Lala, 2016)

Table 9-Service quality dimensions and criteria (i)

R. N	Author	Title	Area	Dimensions	Criteria's
9	(Ather Sidiq Zarger & M.F.Lala, 2016)	A proposed framework for service quality dimensions in health sector	Hospital	Reference group	No stated criteria
				infrastructure	Overall look and location of hospital, Availability of medical equipments. , Availability of certain important diagnostic test facilities such as EEG,ECG,ULTRASOUND,CT SCAN etc.,
				Cost	Affordable cost of tests like EEG, ECG, CT SCAN, MRI, SUNOGRAPHY, ULTRASOUND etc., Cheap food charges.andAffordable accommodation charges
				Cleanliness and hygiene	Cleanliness and comfort well-ventilated, with minimal noise level) of your wardroom and toilet,Timely and hygienic food supplied to wards and rooms,
				Waiting Time	Time taken to get appointment with the doctor, Adequate space for waiting in the waiting room, Reasonable time interval between patient arrival and consultation with the doctor is reasonable, Availability of entertaining equipments in the waiting room to avoid boredom, Waiting time for test results.

2.2.9 Summary of the literature

Base on the above service quality dimensions and criteria's described in the above nine tables the the following SERVQUAL model was modified and developed for assessing the service quality of the three top ranked health facilities in Addis Ababa.(R.Kavitha, 2012),(Amjeriya & Malviya, 2012),(Zaim et al., 2010),(Zeithaml et al., 1990),(Whitford, 2016),(Whitford, 2016) and (Ramseook-Munhurrun et al., 2010)

Table 10-Modified SERVIQUAL

<i>R.N</i>	<i>Aut hor</i>	<i>Titl e</i>	<i>Area</i>	<i>Dimensions</i>	<i>Criteria's</i>
				Tangibles	Modern looking equipment ,physical facilities visually appealing , personnel's neatness in appearance , material physically appealing , availability of medical equipment, patient room is Clean and quiet, availability of alternative drugs, availability of proper desk top reference , availability of enough sitting chair in the waiting area, availability of electricity during interruption, well performance of laboratory machines and Employee performance, CD4 test in every 6 month, test viral load in every year, a laboratory test before ART initiation, availability of personnel and communication material & technology
				Reliability ,	Keep appointment day , good and on time Speed of Service , good Speed of registration , accurate treatment , problem solving ,loyal, provide error free services , provide the promised service dependably and accurately and provides Exact information.
				Responsive ness	Responds immediately for complaints, Concerns for patient, a desire to help clients , provide fast response for customer requirements , willing to serve the customers and trustworthy.
				Assurance	Providers are consistently polite, personals are skilled and knowledgeable to answer customers' questions, the Physicians are concerned to patients, ART pharmacists have attitude to patients, ART nurses have attitude to patients, lab. Technicians have attitude to patients, case managers and adherence supporters have attitude to patients and providers give individual attention for customers.
				Empathy	service delivery convenient time , patient's interest focused service , responds to specific need of patients , providers properly informing and listen to patients, use ease way of communication the nurses give attention and patience to their client, and providers understand the specific needs of their customers

2.3 conceptual frame work

The conceptual framework which is described in the figure-1 indicates the crucial process in the research which is useful to show the flow of the study. The study shows the utilization of the five service quality dimensions and for assessing the service quality of health center using patient, services providers and stakeholder's perspectives. the study focuses on SERQUAL model.

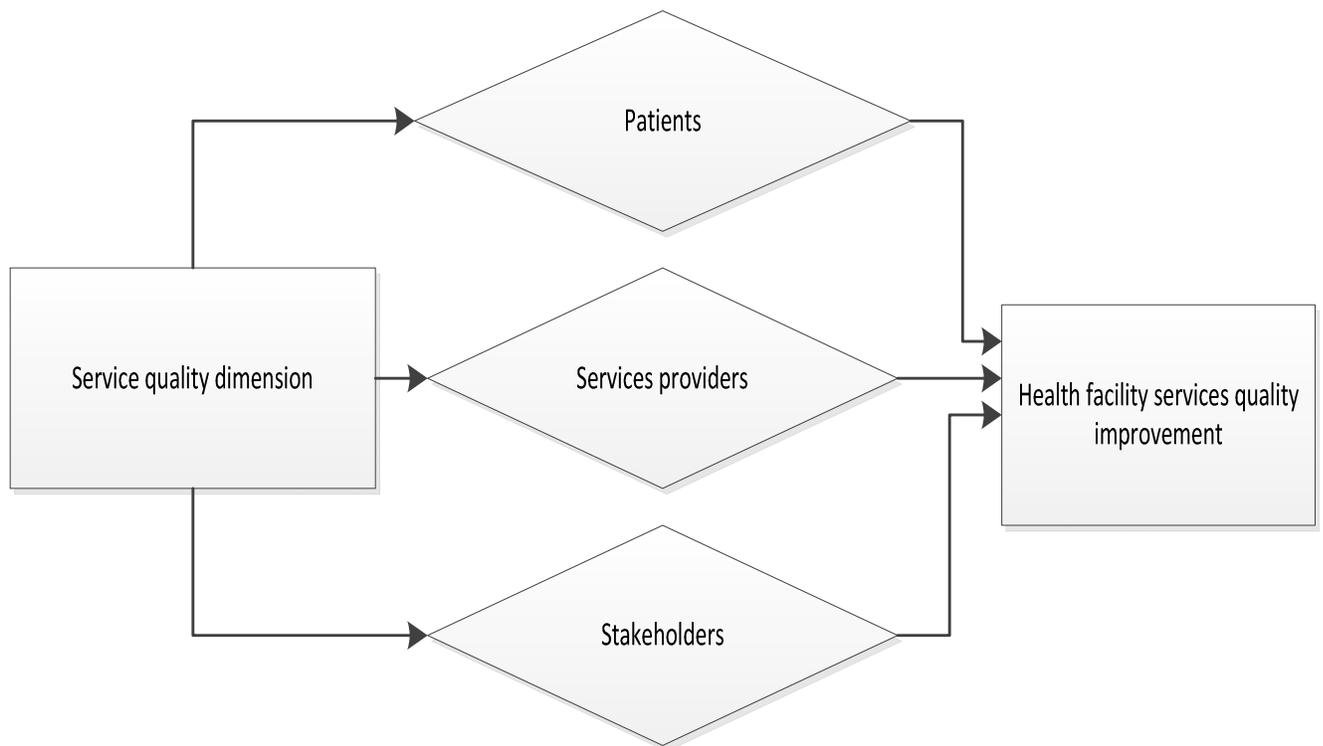


Figure 1 -Conceptual frame work

CHAPTER THREE: METHODOLOGY

3.1 Introduction

This chapter gives an outline of the research approach and methodology used in the study. The source of data required for conducting the study, sampling technique employed, method of data collection and analysis were presented in these sections. Moreover, the statistical method (excel) used to analyze the data and statistical model employed for presentation of the quantitative result briefly discussed here in this chapter.

3.2 Research Design

The research is qualitative and data was collected on the service quality dimensions using SERVQUAL model. Descriptive study is used to explain the service quality of the health centers the perception of patients, services providers and stakeholders was considered to assess the services quality of each health centers.

3.3 Data type and source

The study relayed on primary sources of data. Primary data was collected using structured questionnaires which are developed separately for patients, services providers and stakeholders. And the questionnaires are distributed to patients, services providers and stakeholders of selected health facilities in Addis Ababa

3.4 Target Population and Sample Size

The study carried out in Addis Ababa city particularly in the three ART service providers health facilities which has a significant case loads such as Zewditu, Alert and Black lion. The population size for each the above mention health facilities as far as customer, services providers and stakeholders were concerned respectively 328,14,10(Zewditu),346,14,10(Alert), 154,12,10 (Black Line). The sample size for the three health centers also determined base on 10% precision level (e), confidence level of 90% there for a total of 77,12,9 (Zewditu) , 78,12,9(Alert), 61,12,9 (Black Line) sample size was considered in each center respectively .

As described in the above table the numbers under the shaded box are sample size required by the described population size, the samples for each health centers in this research are calculated using equation-1. 10% precision level (e), confidence level of 90% where used for the calculation.

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

Equation 1 -Sample size calculation

Where, n=sample size N=population e= precision level

The sample size was calculated based on the above formula the below listed n1, n2 and n3 are the sample size for patients on Zewditu, Black lion and Alert hospital respectively.

For Zewditu hospital

$$n1 = \frac{328}{1+328(0.1*0.1)} = 76.6$$

For Balck lion hospital

$$n2 = \frac{154}{1+154(0.1*0.1)} = 60.6$$

For Alert hospital

$$n3 = \frac{346}{1+346(0.1*0.1)} = 77.58$$

The sample size for services providers and stakeholders are calculated in the same way. The table below shows the detailed population and sample size for the selected hospitals.

sample size determination for the selected Health center																	
Health center one /Zewiditu						Health center two/Alert						Health center three/black lion					
average population			sample size			average population			sample size			average population			sample size		
client	Staff	S/H	client	staff	S/H	client	staff	S/H	client	staff	S/H	client	staff	S/H	client	staff	S/H
328	14	10	77	12	9	346	14	10	78	12	9	154	12	10	61	11	9

Table 11-Target population of the study and sample taken

3.5 Procedure for Data Collection

The three health facilities were selected according to their case load. The patients, services providers and stakeholders are considered based on random sampling technique. A total of 216 (questionnaires were distributed to the three health centers such as 77,12 and 9 for zewditu hospital patients, services providers and stakeholders. 78,12 and 9 for Alert hospital patients, services providers and stakeholders. 61,11 and 9 for Black lion hospital patients, services providers and stakeholders. A total of 174 collected back .From Zewditu hospital 62,12,9. From Black lion hospital 49, 11 and 9. From Alert hospital 62, 12 and 9 questionnaires which belongs to patients, services providers and stakeholders respectively collected back.

3.6 Methods of data collection

Primary data are gathered from the three selected hospitals through questionnaires. Secondary data were gathered from different documents, reports, journals, conference proceeding, and books which are dealing on service quality particularly ART services. The following points are the systematic approach towards the data collection and analysis.

3.7 Methods of data analysis

The research focus on assessing the existing services quality of the three ART-service providing health facilities using a modified SERVQUAL model derived from the criteria's of the services quality dimensions which are used by different researchers. The five point likert scale is used to assess the services quality of each health facilities and a descriptive statistical analysis for the service quality was conducted using Microsoft excel and SPSS.

3.8 Ethical Consideration

The ethical issues are seriously considered. The research material which is mentioned in this paper is properly cited, the confidentiality of information and willingness of the clients and services providers are considered during data collection.

3.9 Questionnaire Development and Administration

The questionnaire items adopted from previous researches service quality attributes recommended by different researchers. After the items are identified, the questionnaires administered to the target population through personal contact by the researcher and their assistance. Convenience as well as judgment was used in the distribution of questionnaire to the respondent. Sampling techniques was also used to address those people that can effectively assess the service quality. The number of questionnaires distributed to each health facilities under each category of respondent. The above mentioned sampling technique also used with the aim to facilitate the collection of questionnaires from the respondents. The ART case managers in each health facilities are actively participating in the distribution and collection of questionnaires. The participants were asked to rate the ART service quality in each health facilities based on Likert

scales of 1 to 5 where 1 was very poor, 2- poor, 3- neutral, 4- good and 5- very good on performance scale respectively.

3.10 Validity of the instrument

Since the questionnaire is directly developed from the criteria and dimensions in previously used empirical studies which is stated in reputable journals and also tested by the expertise and stakeholders to justify its content validity it was valid.

3.11 Reliability of the instrument

The Cronbach's Alpha test can be used to measure the reliability of the instrument the test was conducted for patient, services providers and stakeholders of all the three selected health facilities separately the table-12 below shows the result. Since all values of the reliability result are under the acceptable domain the questionnaires are reliable.

Table 12-Reliability test

<i>Health center</i>	<i>Perspective</i>	<i>Cronbach's Alpha test</i>
Zewditu hospital	Patients	0.812
	Services providers	0.734
	Stakeholders	0.821
Black lion hospital	Patients	0.718
	Services providers	0.884
	Stakeholders	0.721
Alert hospital	Patients	0.702
	Services providers	0.754
	Stakeholders	0.721

CHAPTER FOUR: RESULT AND DISCUSSION

4.1 Result

The following sub topics in this chapter presents the detailed description and analysis of the data gathered from the patients, service providers and stakeholders of the three top rank ART services providing hospitals in Addis Ababa based on their case load 12157,10418 and 10658 (Zewiditu, Black lion and Alert respectively).the collected data presented in tables and diagrams as follows.

4.2 Zewiditu –hospital services quality assessment result and dissuasion

In the following sub topics the service quality assessment of Zewditu hospital from the perspective of patients, services providers and stakeholders will be presented. More over the demographic information of the health center also discussed accordingly.

4.2.1 Demographic Information of the Respondents

A total of 77, 12, and 9 questionnaires were distributed to patient, services providers and stockholders of Zewditu hospital respectively. Among these 80%, 100% and 100% questionnaires were collected back. The below Figure 2,3 and 4 below shows the gender, age and education level distribution of the respondents in the health facilities respectively.

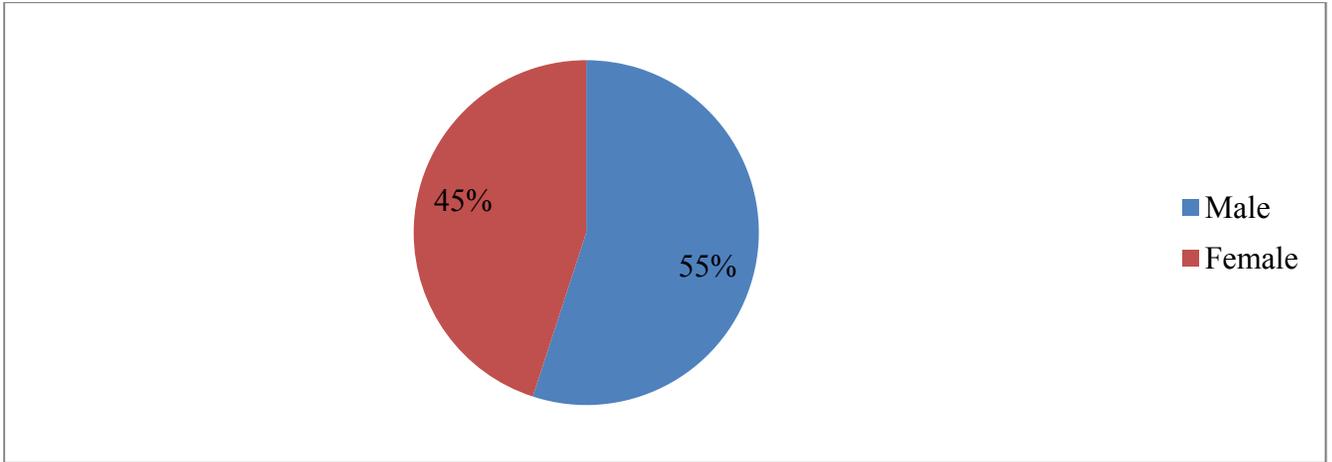


Figure 2-Zewiditu –hospital respondent sex demography

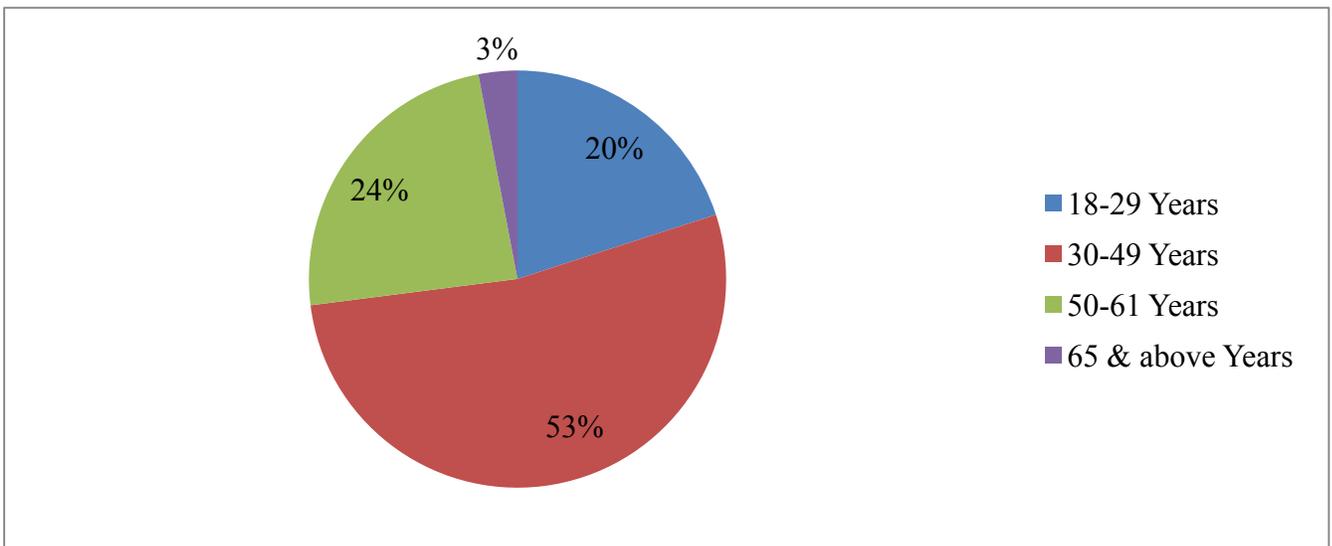


Figure 3-Zewiditu –hospital respondent age

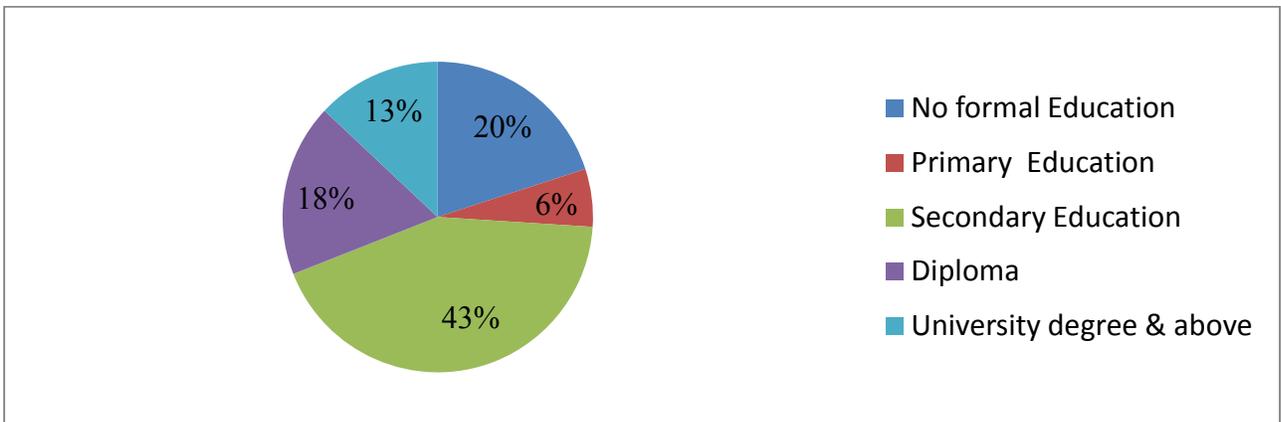


Figure 4-Zewiditu –hospital respondent education level

4.2.2. Service quality assessment of Zewditu hospital

The literature analysis shows that different scholars used SERVQUAL model or instrument to measure the service quality of the hospital. The model use five quality dimensions that is frequently used to investigate customer satisfaction (Talib et al., 2015).But the criteria's used to measure the service quality differ in numbers although the dimensions are commonly five namely Reliability, Tangibility, Responsiveness, Assurance and Empathy. In the following subsequent part the service quality of Zewditu hospital is going to analyzed using patients, services providers and customer's point of view. The following figure 5,6, and 7 are used to discussed the findings from the analysis.

4.2.2.1 Patients side service quality assessment of Zewditu hospital

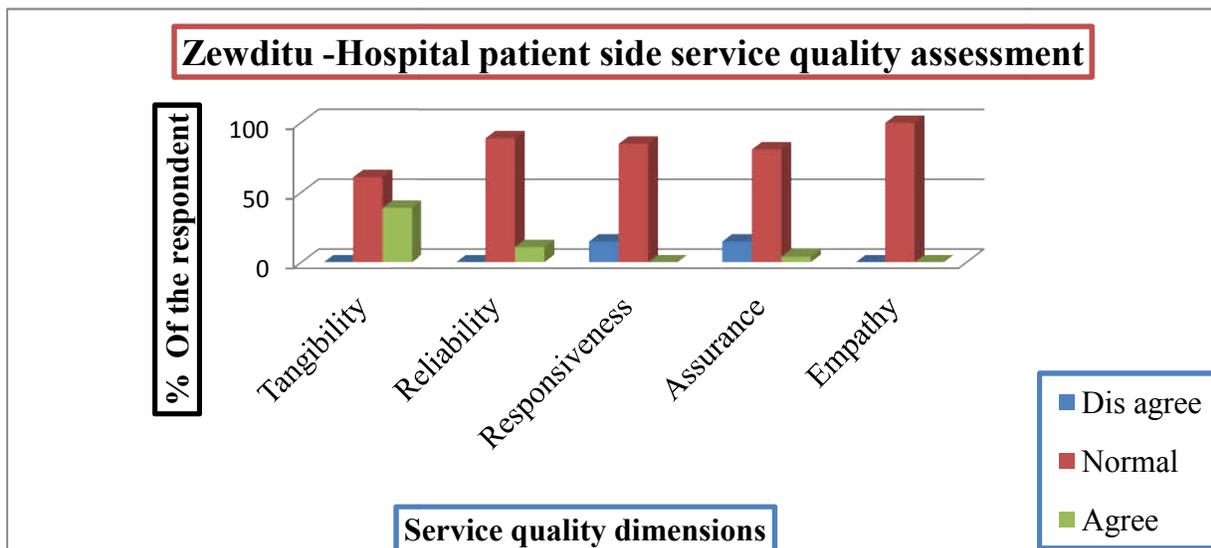


Figure 5-Patient side services quality assessment of Zewditu hospital

From the figure -5 above as far as Zewditu hospital is concerned the patient perspectives in the five quality dimensions is as follows. From the tangibility services quality dimension (0, 61, and 39 %) of the patients respectively respond dis- agree, normal and agree about the services

quality delivered). When the reliability quality dimensions concerned (0, 89, and 11 %) of the patients respectively respond dis-agree, normal and agree about the services quality delivered .When the responsiveness quality dimensions concerned (15, 85, and 0 %) of the patients respectively respond dis-agree, normal and ager about the services quality delivered. When the assurance quality dimensions concerned (15, 81, and 4 %) of the patients respectively respond dis-agree, normal and ager about the services quality delivered. Finally when the empathy quality dimensions concerned (0,100, and 0 %) of the patients respectively respond dis-agree, normal and ager about the services quality.

4.2.2.2 Services providers service quality assessment of Zewditu hospital

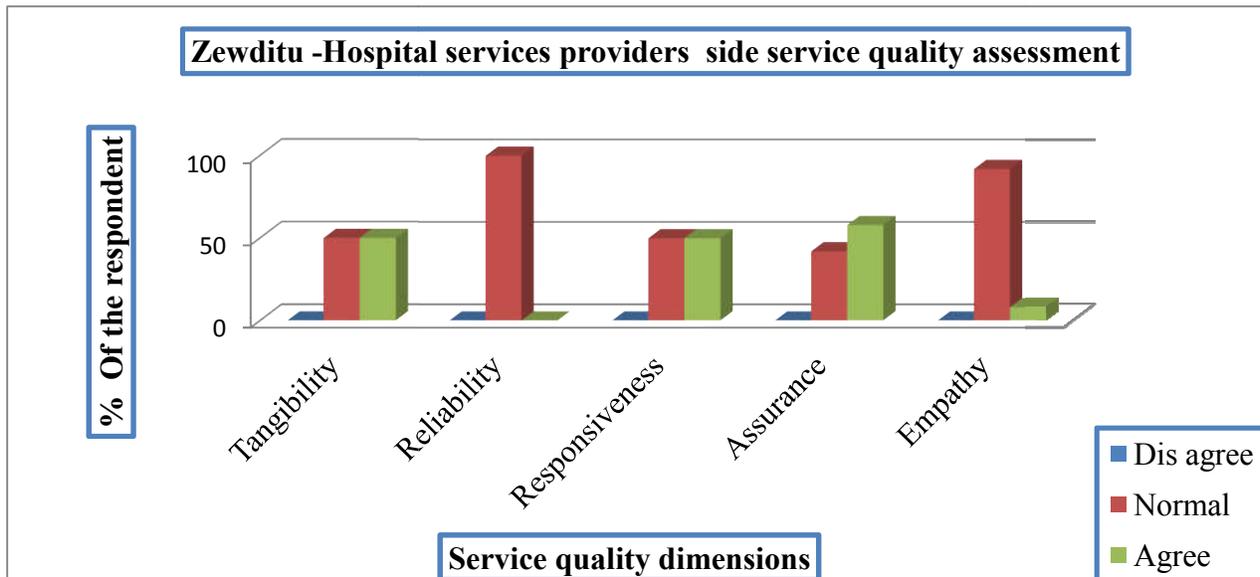


Figure 6-Service providers side services quality assessment of Zewditu hospital

From the figure -6 above as far as Zewditu hospital is concerned the services provider's perspectives in the five quality dimensions was as follows. From the tangibility services quality dimension (0, 50, and 50 %) of the services providers respectively respond dis-agree, normal and agree about the services quality delivered). When the reliability quality dimensions concerned (0,100, and 0 %) of the services providers respectively respond dis agree, normal and ager about the services quality delivered .When the responsiveness quality dimensions concerned (0,50,

and 50 %) of the services providers respectively respond dis agree, normal and ager about the services quality delivered. When the assurance quality dimensions concerned (0,42, and 58 %) of the services providers respectively respond dis agree ,normal and ager about the services quality delivered. Finally When the empathy quality dimensions concerned (0,92, and 8 %) of the services providers respectively respond dis agree, normal and ager about the services quality delivered.

4.2.2.3 Stakeholders service quality assessment of Zewditu hospital

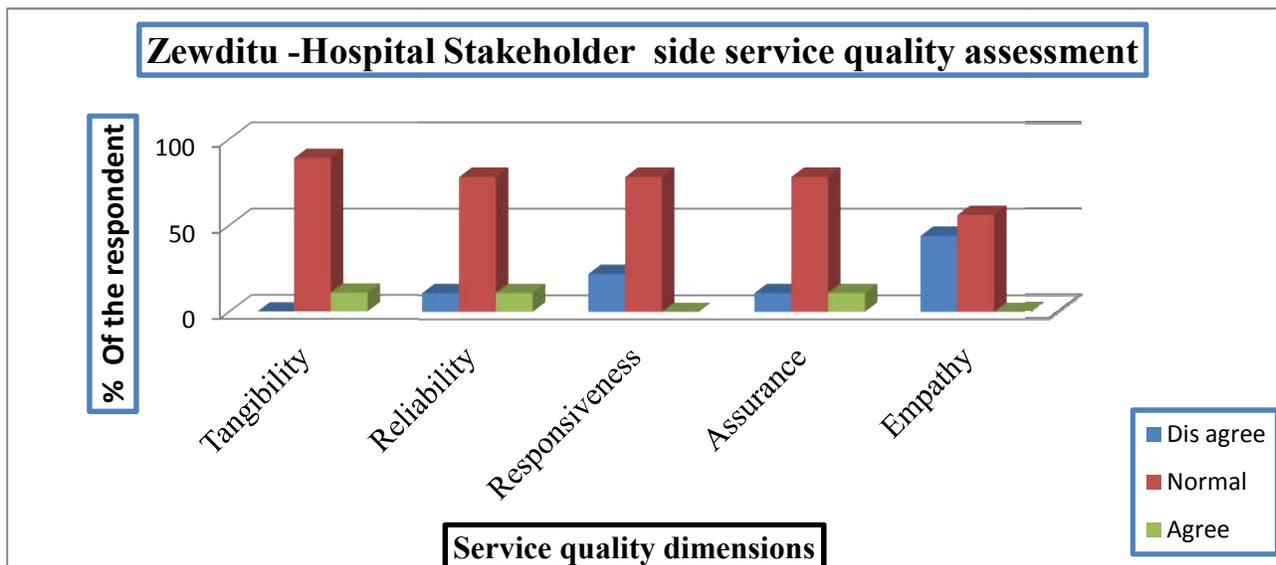


Figure 7-Stackholders side’s services quality assessment of Zewditu hospital

From the figure -7 above as far as Zewditu hospital is concerned the stakeholder perspectives in the five quality dimensions is as follows. From the tangibility services quality dimension (0,89, and 11 %) of the stakeholder respectively respond dis agree, normal and ager about the services quality delivered . When the reliability quality dimensions concerned (11,78, and 11 % of the stakeholder respectively respond dis agree ,normal and ager about the services quality delivered .When the responsiveness quality dimensions concerned (22,78, and 0 %)of the stakeholder’s respectively respond dis agree, normal and ager about the services quality delivered. When the assurance quality dimensions concerned (11,78, and 11 %) of the stakeholders respectively respond dis agree, normal and ager about the services quality delivered. Finally When the

empathy quality dimensions concerned (44, 56, and 0 %) of the stakeholder respectively respond dis agree, normal and ager about the services quality delivered

4.3 Black lion –hospital services quality assessment result and dissuasion

In the following sub topics the service quality assessment of Black lion hospital from the perspective of patients, services providers and stockholders will be presented. More over the demographic information of the health center also discussed accordingly.

4.3.1 Demographic Information of the Respondents

A total of 78, 12, and 9 questionnaires were distributed to patient, services providers an stockholders of Black lion hospital respectively. Among these 80%, 100% and 100% questionnaires were collected back. The below Figure 8,9 and 10 below shows the gender, age and education level distribution of the respondents in the health facilities respectively

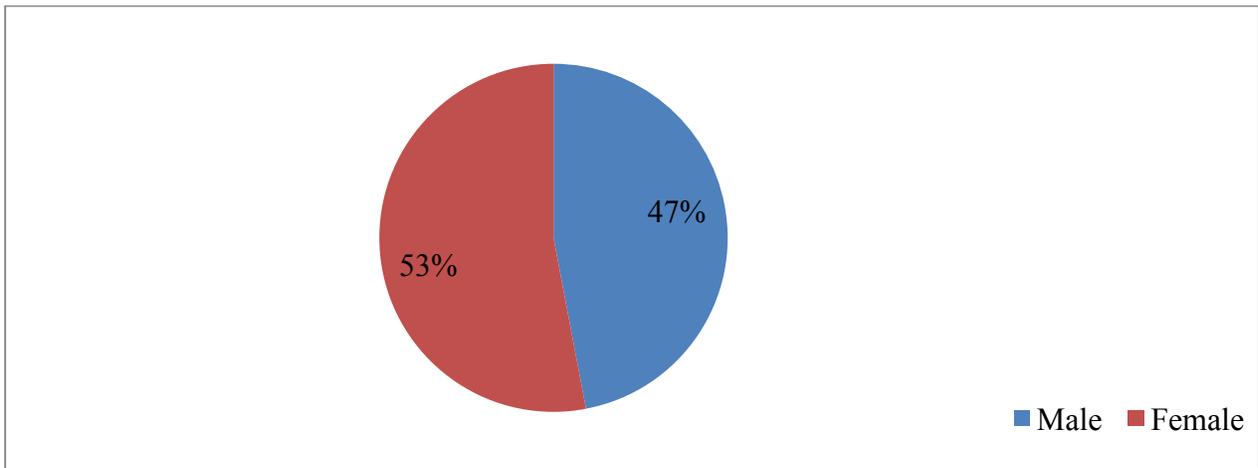


Figure 8-Black lion–hospital respondent sex demography

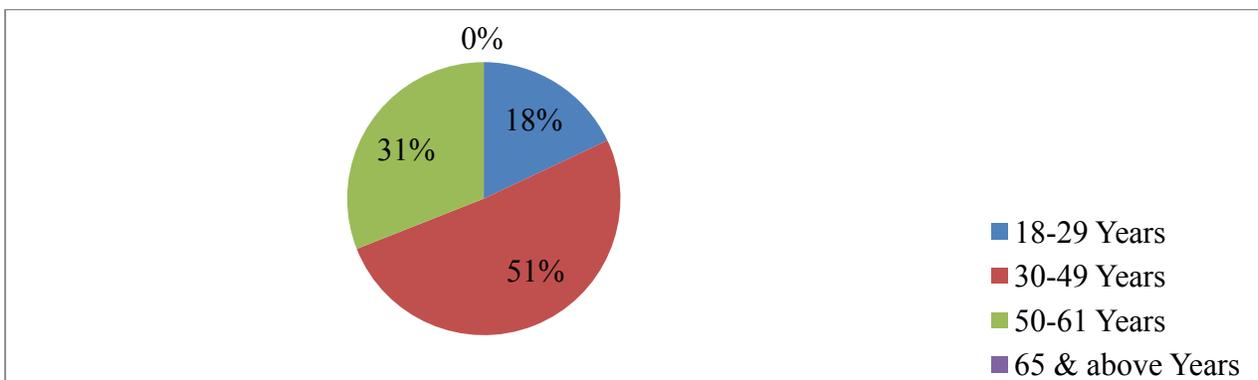


Figure 9-Black lion –hospital respondent age

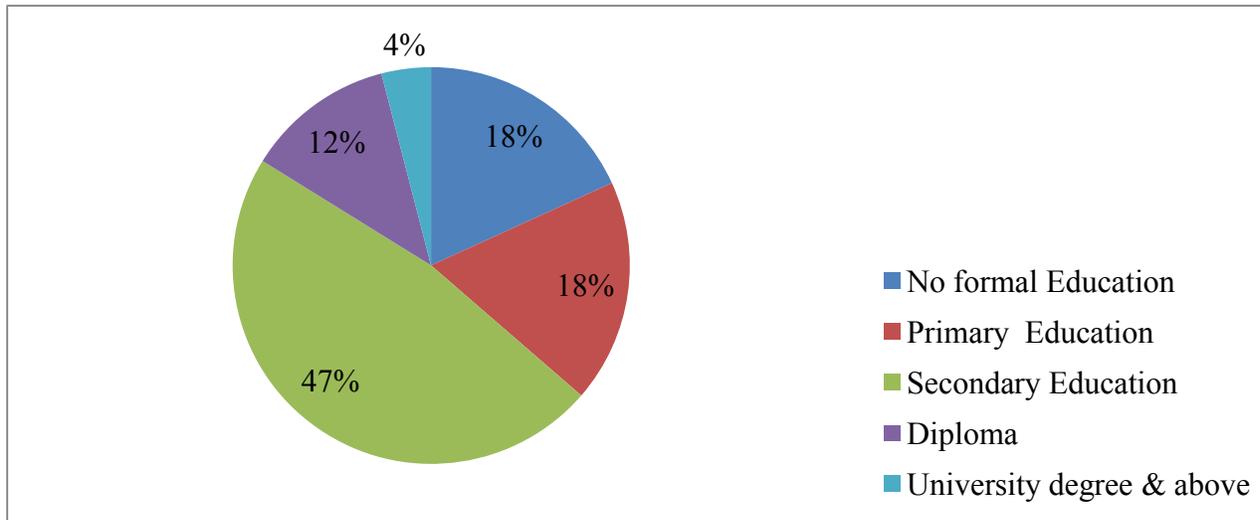


Figure 10-Black lion–hospital respondent education level

4.3.2 Service quality assessment of Black lion hospital

The quality of a services can be assessed using different methods. The literature analysis shows that different scholars used SERVQUAL model or instrument to measure the service quality of the hospital. The model use five quality dimensions that is frequently used to investigate customer satisfaction (Talib et al., 2015).But the criteria's used to measure the service quality differ in numbers although the dimensions are commonly five namely Reliability, Tangibility, Responsiveness, Assurance and Empathy. In the following subsequent part the service quality of Black lion hospital is going to analyzed using patients, services providers and customers point of view. The following figure 11,12 and 13 are used to discussed the findings from the analysis.

4.3.2.1 Patients side service quality assessment of Black lion hospital

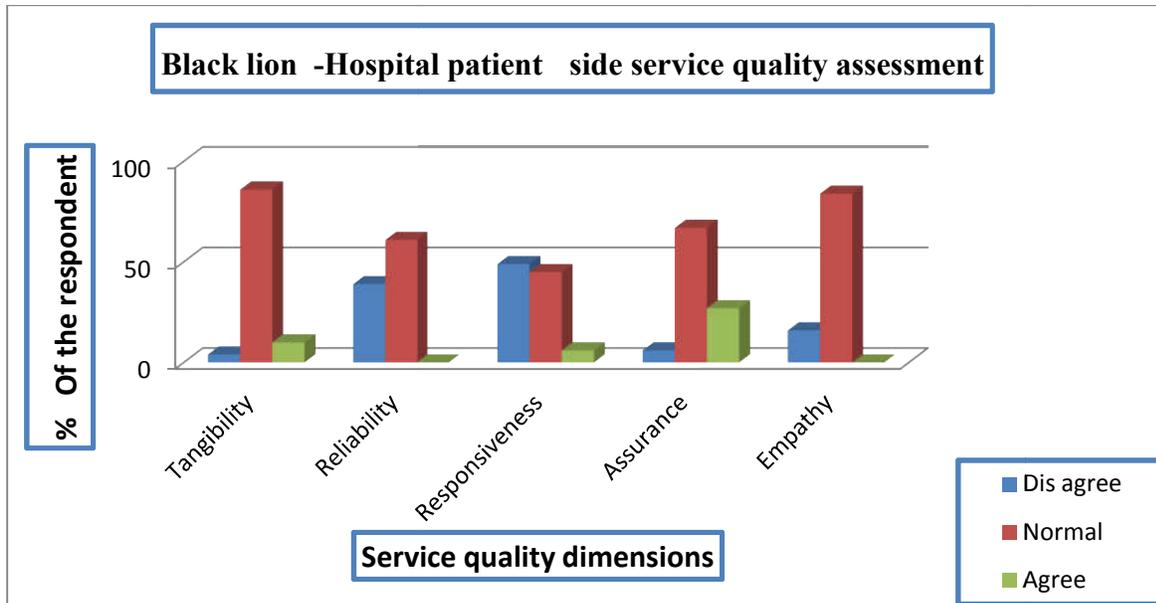


Figure 11-Patients side service quality assessment of Black lion hospital

From the figure -11 above as far as Black lion hospital is concerned the patient perspectives in the five quality dimensions is as follows. From the tangibility services quality dimension (4, 86, and 10 %) of the patients respectively respond dis agree, normal and agree about the services quality delivered). When the reliability quality dimensions concerned (39,61, and 0 %) of the patients respectively respond dis agree, normal and agree about the services quality delivered .When the responsiveness quality dimensions concerned (49,45, and 6 %) of the patients respectively respond dis agree ,normal and agree about the services quality delivered. When the assurance quality dimensions concerned (6,67, and 27 %) of the patients respectively respond dis agree, normal and agree about the services quality delivered. Finally When the empathy quality dimensions concerned (16, 84, and 0 %) of the patients respectively respond dis agree, normal and agree about the services quality delivered.

4.3.2.2 Service providers side service quality assessment of Black lion hospital

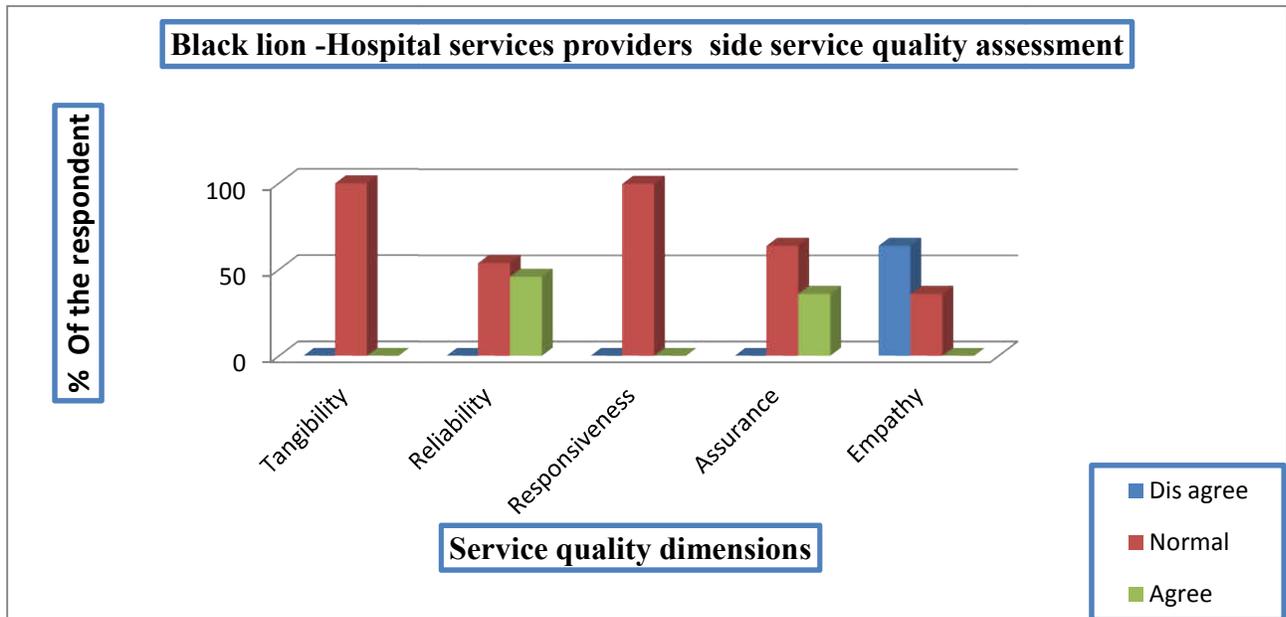


Figure 12-Service providers side service quality assessment of Black lion

From the figure -12 above as far as Black lion hospital is concerned the services providers perspectives in the five quality dimensions is as follows. From the tangibility services quality dimension (0,100, and 0 %) of the services providers respectively respond dis agree, normal and agree about the services quality delivered . When the reliability quality dimensions concerned (0,54 , and 46 %) of the services providers respectively respond dis agree ,normal and agree about the services quality delivered .When the responsiveness quality dimensions concerned (0 ,100 and 0 %) of the services providers respectively respond dis agree, normal and agree about the services quality delivered. When the assurance quality dimensions concerned (0,64, and 36 %) of the services providers respectively respond dis agree, normal and agree about the services quality delivered. Finally When the empathy quality dimensions concerned (64 ,36, and 0 %) of the services providers respectively respond dis agree ,normal and agree about the services quality delivered.

4.3.2.3 Stakeholders side service quality assessment of Black lion hospital

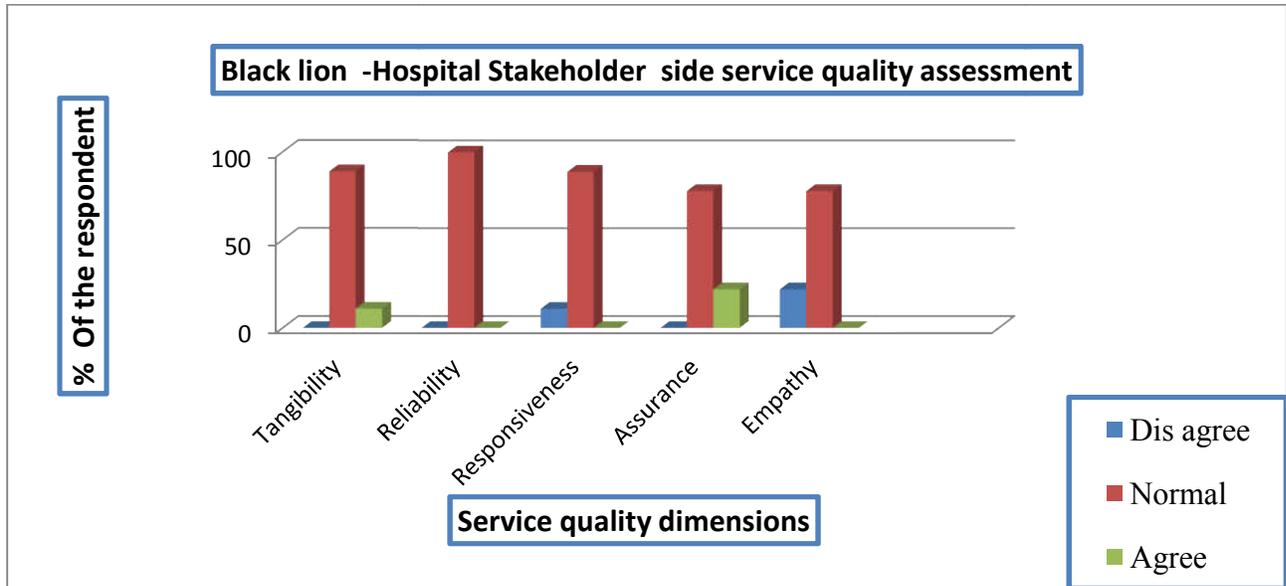


Figure 13-Stakeholders side service quality assessment of Black lion hospital

From the figure -13 above as far as Black lion hospital is concerned the stakeholders' perspectives in the five quality dimensions is as follows. From the tangibility services quality dimension (0, 89, and 11 %) of the stakeholder's respectively respond dis agree, normal and agree about the services quality delivered). When the reliability quality dimensions concerned (0,100, and 0 %) of the stakeholder's respectively respond dis agree, normal and agree about the services quality delivered .When the responsiveness quality dimensions concerned (11,89, and 0 %) of the stakeholder's respectively respond dis agree, normal and agree about the services quality delivered. When the assurance quality dimensions concerned (0,78 , and 22 %) of the stakeholder's respectively respond dis agree, normal and agree about the services quality delivered. Finally When the empathy quality dimensions concerned (22,78, and 0 %) of the stakeholder's respectively respond dis agree, normal and agree about the services quality delivered.

4.4 Alert –hospital services quality assessment result and dissuasion

A total of 61, 11, and 9 questionnaires were distributed to patient, services providers and stakeholders of Alert hospital respectively. Among these 80%, 100% and 100% questionnaires were collected back. The below Figure 14, 15 and 16 below shows the gender, age and education level distribution of the respondents in the health facilities respectively

4.4.1 Demographic Information of the Respondents

In the following sub topics the service quality assessment of Alert lion hospital from the perspective of patients, services providers and stockholders will be presented. More over the demographic information of the health center also discussed accordingly.

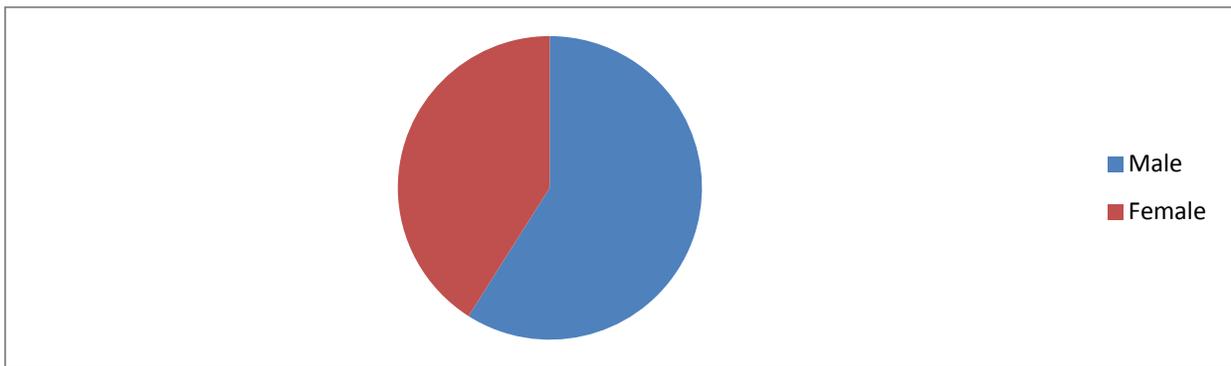


Figure 14-Alert –hospital respondent sex demography

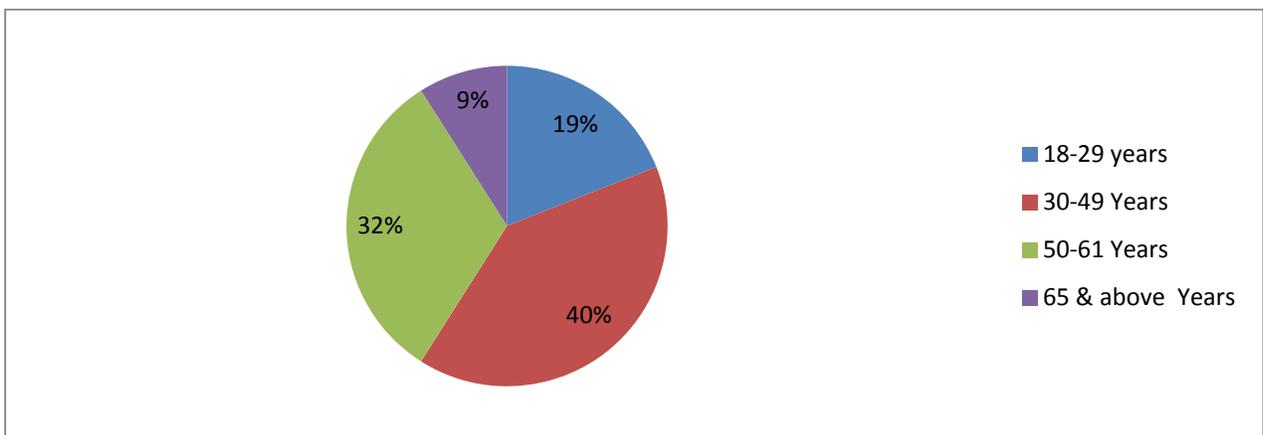


Figure 15-Alert –hospital respondent age

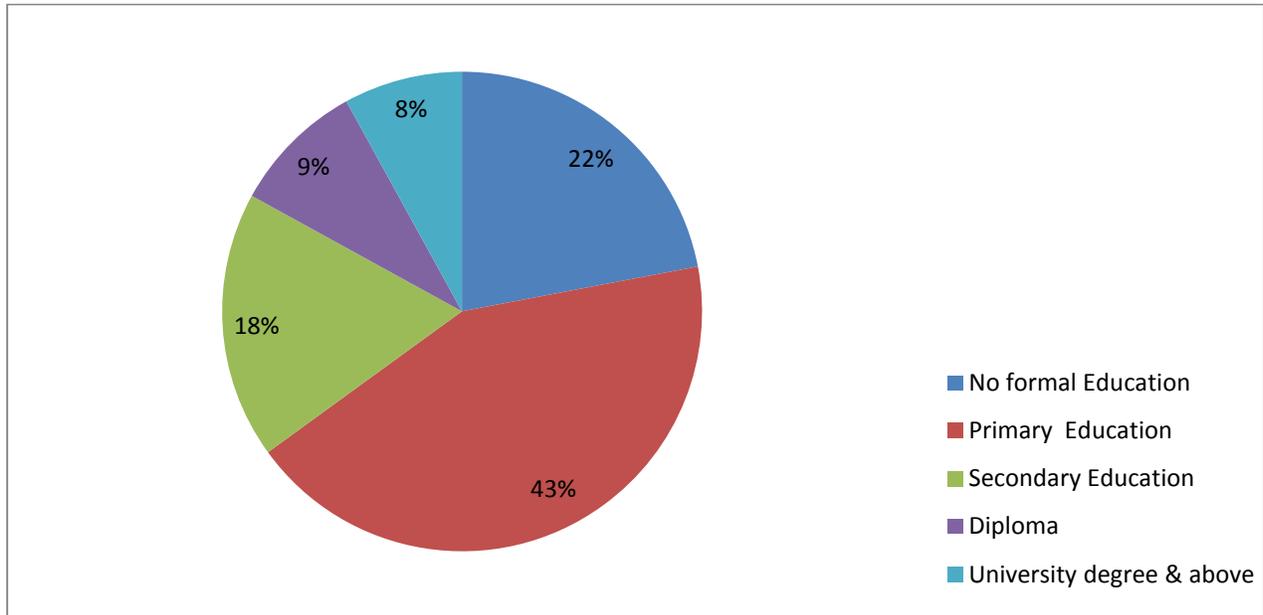


Figure 16-Alert –hospital respondent education level

4.4.2 Service quality assessment of Alert hospital

Like manufacturing industries the services sector quality also can be assessed using different methods. The literature analysis shows that different scholars used SERVQUAL model or instrument to measure the service quality of the hospital. The model use five quality dimensions that is frequently used to investigate customer satisfaction (Talib et al., 2015).But the criteria's used to measure the service quality differ in numbers although the dimensions are commonly five namely Reliability, Tangibility, Responsiveness, Assurance and Empathy. In the following subsequent part the service quality of Alert hospital is going to analyzed using patients, services providers and customers point of view. The following figure 17,18,and 19 are used to discussed the findings from the analysis.

4.4.2.1 Patients side service quality assessment of Alert hospital

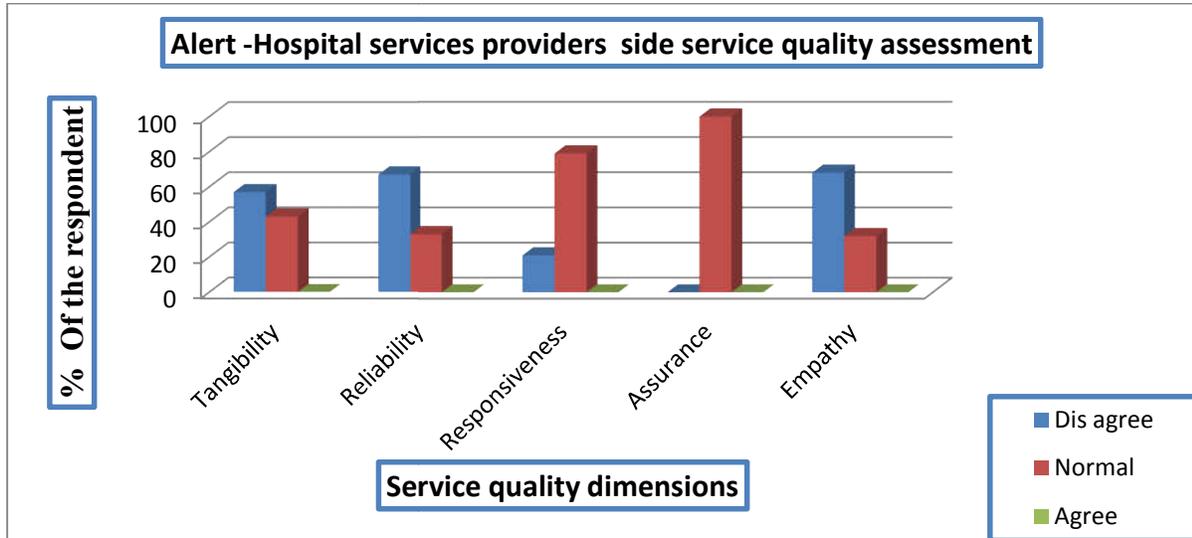


Figure 17-patients side service quality assessment of Alert hospital

From the figure -17 above as far as Alert hospital is concerned the patient perspectives in the five quality dimensions is as follows. From the tangibility services quality dimension (57,43, and 0 %) of the patients respectively respond dis agree, normal and ager about the services quality delivered). When the reliability quality dimensions concerned (67,33, and 0 %) of the patients respectively respond dis agree, normal and ager about the services quality delivered .When the responsiveness quality dimensions concerned (21,79, and 0 %) of the patients respectively respond dis agree, normal and ager about the services quality delivered. When the assurance quality dimensions concerned (0, 100, and 0 %) of the patients respectively respond dis agree, normal and ager about the services quality delivered. Finally When the empathy quality dimensions concerned (68, 32, and 0 %) of the patients respectively respond dis agree ,normal and ager about the services quality delivered.

4.4.2.2 Service providers side service quality assessment of Alert hospital

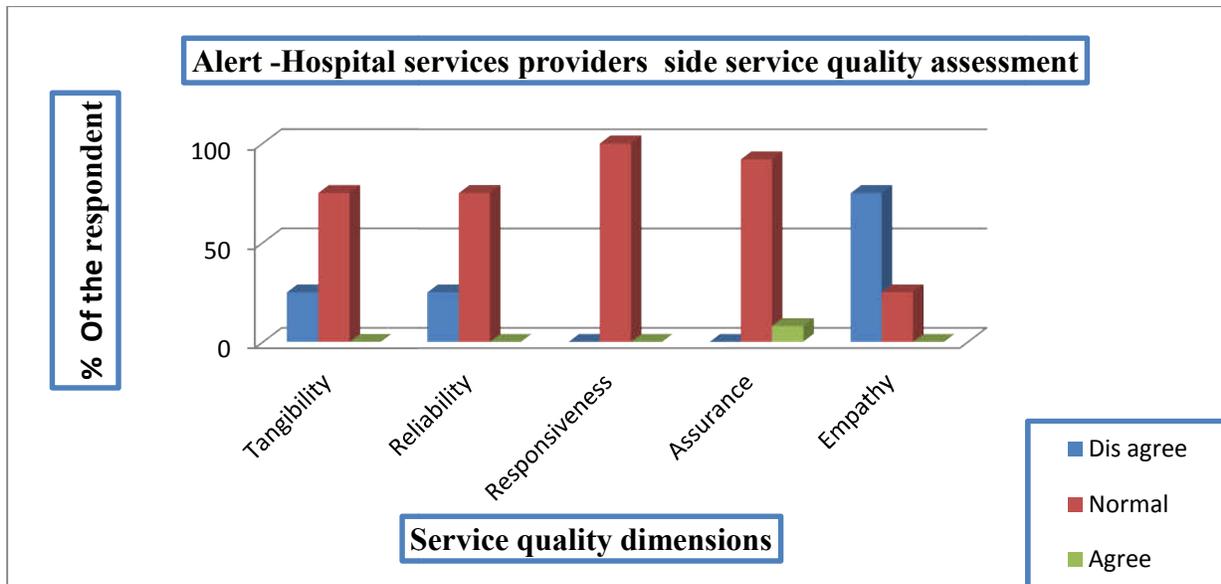


Figure 18-Services provider's side service quality assessment of Alert hospital

From the figure -18 above as far as Alert hospital is concerned the services provider's perspectives in the five quality dimensions is as follows. From the tangibility services quality dimension (25,75, and 0 %) of the services providers respectively respond dis agree, normal and ager about the services quality delivered). When the reliability quality dimensions concerned (25,75, and 0 %) of the services providers respectively respond dis agree, normal and ager about the services quality delivered .When the responsiveness quality dimensions concerned (0,100 and 0 %) of the services providers respectively respond dis agree, normal and ager about the services quality delivered. When the assurance quality dimensions concerned (0, 92, and 8 %) of the services providers respectively respond dis agree, normal and ager about the services quality delivered. Finally When the empathy quality dimensions concerned (75, 25, and 0 %) of the services providers respectively respond dis agree, normal and ager about the services quality delivered.

4.4.2.3 Stakeholders side service quality assessment of Alert hospital

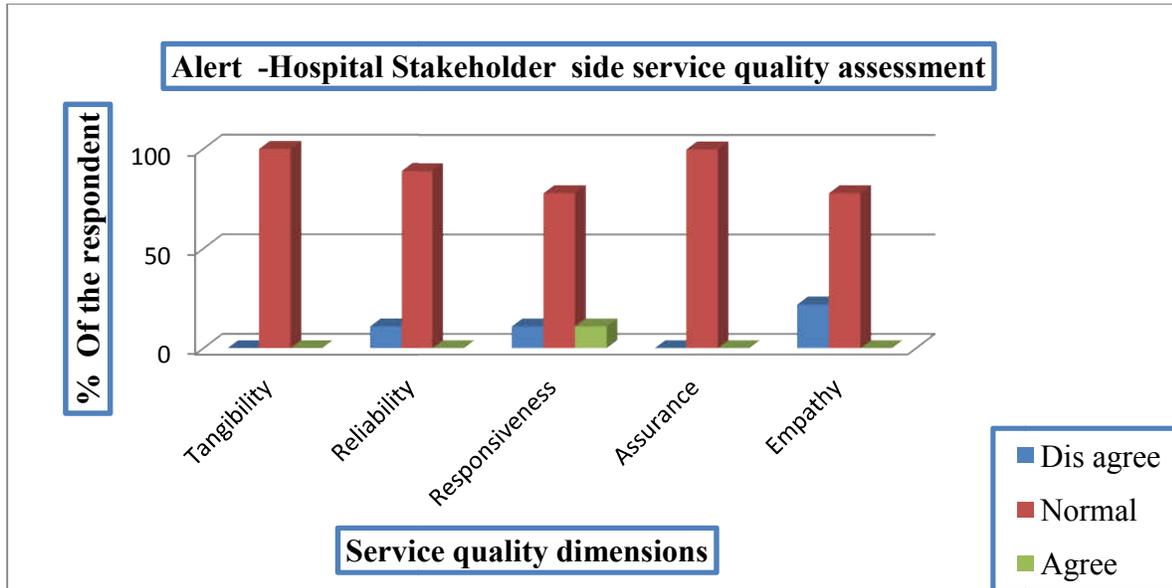


Figure 19-Stackholders side service quality assessment of Alert hospital

From the figure -19 above as far as Alert hospital is concerned the stakeholder perspectives in the five quality dimensions is as follows. From the tangibility services quality dimension (0,100, and 0 %) of the stakeholder's respectively respond dis agree, normal and ager about the services quality delivered). When the reliability quality dimensions concerned (11,89 , and 0 %) of the stakeholder's respectively respond dis agree, normal and ager about the services quality delivered .When the responsiveness quality dimensions concerned (11,78 , and 11 %) of the stakeholder's respectively respond dis agree, normal and ager about the services quality delivered. When the assurance quality dimensions concerned (0, 100 and 0 %) of the stakeholder's respectively respond dis agree, normal and ager about the services quality delivered. Finally When the empathy quality dimensions concerned (22,78, and 0 %) of the stakeholder's respectively respond dis agree, normal and ager about the services quality delivered.

4.4.3 Summary of the findings

The aggregate assessment of the services quality from patient, services providers and stakeholder's point of view for each health center is discussed in the following paragraph. The below table -12 shows the detailed assessment.

From tangibility quality dimensions point of view the aggregate assessment of Zewditu hospital was (0, 67 and 33 %) disagree, normal and agree respectively for the services offer. In the case of Black lion hospital the result was (1, 92 and 7 %) disagree, normal and agree respectively. The Alert hospital result was (27, 73 and 0 %) disagree, normal and agree respectively.

From reliability quality dimensions point of view the aggregate assessment of Zewditu hospital was (4, 89 and 7 %) disagree, normal and agree respectively for the services offer. In the case of Black lion hospital the result was (13, 72 and 15 %) disagree, normal and agree respectively. The Alert hospital result was (34, 65 and 0 %) disagree, normal and agree respectively.

From responsiveness quality dimensions point of view the aggregate assessment of Zewditu hospital was (12, 71 and 17 %) disagree, normal and agree respectively for the services offer. In the case of Black lion hospital the result was (20, 78 and 2 %) disagree, normal and agree respectively. The Alert hospital result was (11, 86 and 3 %) disagree, normal and agree respectively.

From assurance quality dimensions point of view the aggregate assessment of Zewditu hospital was (9, 67 and 24 %) disagree, normal and agree respectively for the services offer. In the case of Black lion hospital the result was (2, 70 and 28 %) disagree, normal and agree respectively. The Alert hospital result was (0, 97 and 3 %) disagree, normal and agree respectively.

From empathy quality dimensions point of view the aggregate assessment of Zewditu hospital was (15, 83 and 2%) disagree, normal and agree respectively for the services offer. In the case of Black lion hospital the result was (34, 66 and 0 %) disagree, normal and agree respectively. The Alert hospital result was (55, 45 and 3 %) disagree, normal and agree respectively.

Table 13-Summary of service quality assessment

	Patient			Service provider			Stakeholder			Aggregate total			SUM
	Disagree	Normal	Agree	Dis agree	Normal	Agree	Dis agree	Normal	Agree	Dis agree	Normal	Agree	
Tangible													
Zewiditu	0	61	39	0	50	50	0	89	11	0	66.6667	33.3333	100
Black lion	4	86	10	0	100	0	0	89	11	1.3333333	91.6667	7	100
Alert	57	43	0	25	75	0	0	100	0	27.3333333	72.6667	0	100
Reliability													
Zewiditu	0	89	11	0	100	0	11	78	11	3.6666667	89	7.33333	100
Black lion	39	61	0	0	54	46	0	100	0	13	71.6667	15.3333	100
Alert	67	33	0	25	75	0	11	89	0	34.3333333	65.6667	0	100
Responsivness													
Zewiditu	15	85	0	0	50	50	22	78	0	12.3333333	71	16.6667	100
Black lion	49	45	6	0	100	0	11	89	0	20	78	2	100
Alert	21	79	0	0	100	0	11	78	11	10.6666667	85.6667	3.66667	100
Assurance													
Zewiditu	15	81	4	0	42	58	11	78	11	8.6666667	67	24.3333	100
Black lion	6	67	27	0	64	36	0	78	22	2	69.6667	28.3333	100
Alert	0	100	0	0	92	8	0	100	0	0	97.3333	2.66667	100
Empathy													
Zewiditu	0	100	0	0	92	8	44	56	0	14.6666667	82.6667	2.66667	100
Black lion	16	84	0	64	36	0	22	78	0	34	66	0	100
Alert	68	32	0	75	25	0	22	78	0	55	45	0	100

CHAPTER FIVE: CONCLUSIONS & RECOMMENDATION

5.1 Conclusions

The finding from the analysis shows that in most of the dimensions the respondents agree that the services provided in each health facility dominantly normal. But in some quality dimensions there is a relative difference among the selected health facilities. From the tangibility, empathy and reliability service quality perspective Alert is relatively poor which means 27, 55 and 34 % of the respondent respectively disagree the services quality in the health facility. In most dimension Black lion hospital is the second ranked where as zewiditu is better. From the responsiveness point of view Black lion is relatively weak because 20% of the respondent not happy and also the case of empathy 34% of the respondent are not happy. Black lion and Zewdetu respectively are good with respect to assurance quality dimensions 28% and 24% of the respondent are not happy about the quality of the services. Finally in conclusion in all the five quality dimensions and in each selected health facilities for the perspective of each respondent the quality of the services is normal.

5.2 Recommendations

Finally from the entire analysis it is observed that the service quality in each ART –provider’s health facilities needs further improvement. Moreover the patients, services provider and stakeholder assumes that the quality in each health center is normal therefore the following recommendations are forwarded to enhance the service quality in each health centers

- ✓ Black lion hospital should enhance the responsiveness and empathy of the service to satisfy the customers need.
- ✓ Alert hospital shows weak service quality especial in empathy, tangibility and reliability of the service there for serious concern should be given to improve these quality dimensions.
- ✓ Zewditu hospital should enhance the responsiveness and empathy of the service to satisfy the customers.

- ✓ The health facilities should focused on different service quality dimension and implement different quality improvement program to enhance the service quality
- ✓ Since HIV has a significant relation with stigma the empathy quality dimensions should be given serious concern all health facility.

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Appendixes

Appendix A Questioner for patients (Amharic)

ቅድስተማርያምዩኒቨርሲቲ

የድህረምረቃ ት/ቤት

የፕሮጀክት ማኔጅመንት ምህርት ክፍል

ክቡራንተ ጠያቂዎች (ለፀረኤች.አይ.ቪ.መድሃኒትተ ጠያቂዎች)

የዚህ መጠይቅ አላማ የፀረኤች.አይ.መድሃኒት አገልግሎት ሰጪ ተቋማት የአገልግሎት ጥራት ለመመዘን የሚያስችል መረጃዎችን መስጠት ስለሚችል:: ጥናቱ ለፕሮጀክት ማኔጅመንት ድህረምረቃ ማንኛው ወረቀት ነት የሚውል ሲሆን ለመጠይቁ የተሰበሰቡት መረጃዎች ለጥናቱ ቻይን ሲሆን ለሌሎች ጥያቄዎች ለመጠቀም ለማይቻል ነው:: ስለዚህ መጠይቁን በተቻለ መጠን ፍትህ ወይንም ለእውቀት የተመሰረተ ተኮር ሲሆን እየጠየቁለት ደረገልኝ ትብብር ከወዲሁ አመሰግናለሁ::

በመጠይቁ ላይ ስምዎን መጻፍ አስፈላጊ አይደለም:: ከታች የተዘረዘሩ ጥያቄዎች የመረጡትን መልስ በ (X) ምልክት ይግለጹ

የአገልግሎት ጥራት መመዘኛ መረጃ መስጠት ስለሚችል

ሀ. መሰረታዊ መረጃ

1. የጤና ተቋም ስም (1) ዘውዲ ተሆስፒታል [] (2) ጥቁር አንበሳ ሆስፒታል [] (3) አለርት ሆስፒታል []

2. የፀረኤች.አይ.ቪ.መድሃኒት መውሰድ ከጀመሩ ስንት ጊዜ ሆኑ?

1) < 1 ዓመት [] 2) < 5 ዓመት [] 3) < 10 ዓመት [] 4) > 10 ዓመት []

ለ. ማህበረሰባዊ መረጃ

3. የታ/ ስረዓተ ቦታ (1) ወንድ [] (2) ሴት []

4. ዕድሜ በአመታት (1) [18-29] (2) [30-49] (3) [50-64] (4) [65 እና ከዚያ በላይ]

5. የጋብቻ ሁኔታ (1) ያገባች [] (2) የተለያየ/የች [] (3) ፍቺ የፈፀመ/ች [] (4) የትዳር አጋሩ/ሯ በህይወት የሌሌ/ች [] (5) ያላገባች []

ሐ. ማህበራዊ እና ኢኮኖሚያዊ መረጃ

6. የስራ ሁኔታ (1) ተቀጣሪ [] (2) በግሉ የሚሰራ/ምትሰራ [] (3) ጡረተኛ [] (4) ስራ አጥ [] (5) ተማሪ []

8. የወርገቢዎምንድህልነው 1) < 1000 [] 2) 1001-2000 [] 3) 2001-4000 [] (4) 4001-6000 [] 5) ≥ 6001 []

7. የትምህርትደረጃሁኔታ

- (1) መደበኛ ት/ት ያልተማረ/ች [] (2) አንደኛደረጃያጠናቀቀ/ች [] (3) ሁለተኛደረጃያጠናቀቀ/ች [] (4) ዲፕሎማ
(5) የዩኒቨርሲቲዲግሪናከዚያበላይ []

8. የፀረኤችአይ ቪ ህክምናአገልግሎትበሚሰጡጤናተቋማትውስጥያለውየአገልግሎትአሰጣጥጥራትመገምገሚያቅፅ

በምትገለገሉበትጤናተቋምውስጥያለውየፀረኤች. አይ .ቪ ህክምናአሰጣጥከሚከተሉት 5 ነጥቦችየትኛውላይይይመደባሉ

(1. በጣምአልሰማማም፣ 2. አልሰማማም፣ 3. የተለመደ/የሚጠበቀው ፣ 4. እስማማለሁእና 5. በጣምእስማማለሁ)

በምትገለገሉበትጤናተቋምውስጥያለውየፀረኤች. አይ .ቪ ህክምናአሰጣጥከሚከተሉት 5 ነጥቦችየትኛውላይይይመደባሉ

(1. በጣምአልሰማማም፣ 2. አልሰማማም፣ 3. የተለመደ/የሚጠበቀው፣ 4. እስማማለሁእና 5. በጣምእስማማለሁ)

መለኪያ	ተ. ቁ	ጥያቄ	ደረጃ				
			በጣምአልሰማማም	አልሰማማም	የተለመደ/የሚጠበቀ	እስማማለሁ	በጣምእስማማለሁ
ተጨባጭየሆኑአይታወቅ	1	ጤናተቋሙዘመናዊእናየተሟላየህክምናዕቃዎችአሉትበለውያስባሉ?					
	2	ጤናተቋሙሲታይአንደጤናተቋምማሟላትያለበትንአሟልቷል ?					
	3	የጤናተቋሙባለሙያዎችተገቢውንአላባበስተከትለዋል?					
	4	ጤናተቋሙየሚታየየህክምናዕቃዎችሳቢናቸውበለውያስባሉ?					
	5	ጤናተቋሙየተሟላየህክምናመሳሪያአለው?					
	6	የታካሚዎችክፍልንፅህናውእናፀጥታውየተጠበቀነው?					
	7	ጤናተቋሙአማራጭመድሃኒቶችአሉት?					
	8	ባለሙያዎችየሚጠቀሙበትመረጃሰጪ መመሪያዎችአሏቸው?					
	9	ታካሚዎችተራቸውንበሚጠብቁበትበታበቂመቀመጫአለ?					
	10	በጤናተቋሙሙብራትቢጠፋአማራጭጀነሬተርይጠቀማልወይ?					
	11	በጤናተቋሙያለውየላበራቶሪማሽንጥራትእናየባለሙያውበቃትጥሩነውበለውያስባሉ?					
	12	ሲዲ 4 በየስድስትወሩይሰራለዎታል?					

	13	በየአመቱ በደመዎው ስጥምን ያህል ሻይረስ (ሻይራልሎድ) እንዳለተሰርቶ ለዎት ያውቃል?						
	14	የፀረኤች አይቪህ ክምና ከመጀመሪያው በፊት አስፈላጊው የላብራቶሪ ምርመራ ተደርጎ ለዎታል ወይ?						
	15	ጤና ተቋሙ በቂ በሆነ የሰው ሀብት፣ ቴክኖሎጂ፣ የመገናኛ መሳሪያዎች ደራጅ ነው ብለው ያስባሉ?						
አስተማማኝነት	16	ጤና ተቋሙ በቀጠሮቻቸው ስራ ላይ ለውጥ ይሰጣል?						
	17	ጤና ተቋሙ የሚሰጠው አገልግሎት ፈጣን እና በአስፈላጊው ጊዜ የሚሰጥ ነው ብለው ያስባሉ?						
	18	የጤና ተቋሚ ለአዲስ ታካሚዎች የሚያደርገው ምዝገባ ፈጣን ነው ብለው ያስባሉ?						
	19	በጤና ተቋሙ የሚሰጠው አገልግሎት ከሌሎች የሆኑትን ብለው ያስባሉ?						
	20	በጤና ተቋሙ ያሉ አገልግሎት ሰጪ አካላት ለሚያጋጥሙት ግሮች ገለጻቸው ተቆጣጥሮቻቸው ናቸው?						
	21	ባለሙያዎች የታካሚዎቻቸውን ሚስጥር ይጠብቃሉ ብለው ያስባሉ?						
	22	ባለሙያዎቻቸው ስህተት የፀዳ አገልግሎት ይሰጣሉ?						
	23	ባለሙያዎች ቃል በቃል እና በመመሪያው መሰረት እየሰሩ ነው ብለው ያስባሉ?						
	24	ጤና ተቋሙ የሚፈለገውን መረጃ በአግባቡ ይሰጣል ብለው ያስባሉ?						
	25	ጤና ተቋሙ ለሚነሱ ቅሬታዎች አፋጣኝ እና አስፈላጊውን ምላሽ ይሰጣል?						
	26	ጤና ተቋሙ ለታካሚዎቹ ግድ ይሰጠዋል ብለው ያስባሉ?						
	27	የጤና ተቋሙ ባለሙያዎች የታካሚዎቻቸውን ለመረዳት ፍላጎት አላቸው?						
	28	ጤና ተቋሙ የታካሚዎቹን ፍላጎት በፍጥነት ያሟላል ብለው ያስባሉ?						
	29	በጤና ተቋሙ የሚገኙ ባለሙያዎች የታካሚዎቹን ፍላጎት ለማሟላት ፍቃደኞችና ተቆጣጥሮች ናቸው ብለው ያስባሉ?						
	30	ጤና ተቋሙ ታማኝ ነው ብለው ያስባሉ?						
ማረጋገጫ	31	በጤና ተቋሙ ያሉ ባለሙያዎች ሁል ጊዜ ተሳታፊ ናቸው?						
	32	በተቋሙ ያሉ ባለሙያዎች ከታካሚው የሚነሱ ጥያቄዎችን ለመመለስ በቁጥጥር ውስጥ ናቸው?						
	33	ዶክተሮች ለታካሚዎቻቸው ኩረት ይሰጣሉ ብለው ያስባሉ?						
	34	ኤ.አር.ቴፋር ማህበረሰቦች ለታካሚዎቻቸው ኩረት ይሰጣሉ ብለው ያስባሉ?						
	35	ኤ.አር.ቴነር ሶች ለታካሚዎቻቸው ኩረት ይሰጣሉ ብለው ያስባሉ?						
	36	ላቦራቶሪ ቴክኒሻኖች ለታካሚዎቻቸው ኩረት ይሰጣሉ ብለው ያስባሉ?						
	37	ኬሚስትሪ ስራ ለታካሚዎቻቸው ኩረት ይሰጣሉ ብለው ያስባሉ?						
	38	ባለሙያው ለደንበኞቹ ደንበኛ ኩረት ይሰጣል ብለው ያስባሉ?						
አንደራሰማዩት	39	ጤና ተቋሙ አገልግሎቱን አመቺ በሆነ ስድስት ወር ውስጥ ያስጠነው ብለው ያስባሉ?						
	40	የጤና ተቋሙ አገልግሎት አሰጣጥ የታካሚዎች ፍላጎት ላይ የተከሰተ ነው ብለው ያስባሉ?						
	41	ጤና ተቋሙ ለታካሚዎች የተለየ ፍላጎት ምላሽ ይሰጣል ብለው ያስባሉ?						
	42	ባለሙያዎች ለታካሚዎቻቸው ከሌሎች መረጃ መስጠትና መቀበል ያከናውናሉ ብለው ያስባሉ?						
	43	ጤና ተቋሙ የሚጠቀመው የግንኙነት መንገድ ቀለል ያለ ነው?						
	44	በጤና ተቋሙ ያሉ ነርሶች ለታካሚዎቻቸው ኩረት እና ጥገና ስራ አላቸው ብለው ያስባሉ?						
	45	የጤና ባለሙያዎች ለታካሚዎች የተለየ ፍላጎት ምላሽ ይሰጣል ብለው ያስባሉ?						

Appendix 2 Questioner for health provider (English)

**Saint Mary's University
School of Graduate Studies
Department of Project Management**

Dear respondent,(service provider)

The objective of this questionnaire is to gather firsthand information that will help to assess Service quality on the selected ART service -provider health facilities. This study is undertaken as a partial requirement for the completion of Masters of Project Management. All data and information that will be gathered through this questionnaire will be used for the sole purpose of the research and remains confidential. Therefore, you are kindly requested to respond to the questions with utmost good faith, freely and to the best of your knowledge. There is no need to write your name on the questionnaire.

Thank you in advance for your time and kind cooperation.

For all questions Please mark (x) the chosen answer

(A) Basic Information

1. Health facility (1) Zewiditu hospital [] (2) Black lion Hospital []
(3) Alert hospital []
2. Year of working experience (1) [0-2] (2) [3-5] (3) [6-10] (4) [10 and above]

(B)Socio-Demographic Information

3. Sex/ Gender of respondent (1) Male [] (2) Female []
4. Age in years:(1) [18-29] (2) [30-49] (3) [50-64] (4) [65 and above]

(C) Socio-Economic Information

5. What is your job title?
1) Physician [] 2) ART nurse [] 3) ART pharmacist [] 4) Lab. Technician [] 5)
Case manager/ Adherence supporter [] 6. Other []

(D) Level of Education

6. What is your level of education? 1) No formal education [] 2) Primary education []
3) Secondary education [] 4) college diploma [] 5) University degree and above []

(E) Service quality assessment in the ART- services provider's health facility

7. In the following questions please assesses the quality of the service in the ART – service providers facility in which you are served using the following 5 point scale numbers 1,2,3,4, and 5. 1) = Strongly disagree [SD] 2) = Disagree [D] 3) = Normal [N] 4) = Agree [A] 5) = strongly agree [SA]

Appendix 3 Questioner for stakeholder (English)

**Saint Mary's University
School of Graduate Studies
Department of Project Management**

Dear respondent,(stakeholder)

The objective of this questionnaire is to gather firsthand information that will help to assess Service quality on the selected ART service -provider health facilities. This study is undertaken as a partial requirement for the completion of Masters of Project Management. All data and information that will be gathered through this questionnaire will be used for the sole purpose of the research and remains confidential. Therefore, you are kindly requested to respond to the questions with utmost good faith, freely and to the best of your knowledge. There is no need to write your name on the questionnaire.

Thank you in advance for your time and kind cooperation.

For all questions Please mark (x) the chosen answer

(A) Basic Information

8. Stakeholder's name? (1) MOH [] (2) NEP+ [] (3) CDC Ethiopia [] (4) ICUP [] (5) FHAPCO [] (6) USAID [] (7) ANOPA [] (8) Addis Ababa health bureau [] (9) sub city health bureau []
9. Assessed health facility? (1) Zewiditu hospital [] (2) Black lion Hospital [] (3) Alert hospital []
10. Year of working experience? (1) [0-2] (2) [3-5] (3) [6-10] (4) [10 and above]

(B) Socio-Demographic Information

11. Sex/ Gender of respondent? (1) Male [] (2) Female []
12. Age in years:(1) [18-29] (2) [30-49] (3) [50-64] (4) [65 and above]

D) Level of Education

13. What is your level of education? 1) No formal education [] 2) Primary education [] 3) Secondary education [] 4) college diploma [] 5) University degree and above []

(E) Service quality assessment in the ART- services provider's health facility

14. In the following questions please assesses the quality of the service in the ART – service providers facility in which you are served using the following 5 point scale numbers 1,2,3,4, and 5. 1) = Strongly disagree [SD] 2) = Disagree [D] 3) = Normal

15.

16. [N] 4) = Agree [A] 5) = strongly agree [SA]

Dimensions	R.N	Question	Scale				
			SD	D	N	A	SA
Tangibles	1	Do you think the health facility has modern looking equipment?					
	2	Do the physical facilities in the health facility are visually appealing?					
	3	Does the personnel's in the health facility well dressed and neat in appearance?					
	4	Do the materials in the health facility physically appealing?					
	5	Is there enough availability of medical equipment in the health facility?					
	6	Does the patient room is Clean and quiet?					
	7	Do you think there is enough alternative drugs?					
	8	Do you think the desk top reference properly available?					
	9	Do you think there is enough sitting chair in the waiting area?					
	10	Does the facility provide electricity during interruption?					
	11	Do you think the laboratory machine and Employee performance in the health facility is good?					
	12	Is there CD4 test in every 6 month?					
	13	Does the facility test viral load in every year					
	14	Is there a laboratory test before ART initiation?					
	15	Do you think the availability of personnel, communication material and technology is enough?					
Reliability	16	Does the heath facility service providers keep appointment day?					
	17	Do you think the Speed of Service is good and on time?					
	18	Do you think the Speed of registration is good?					
	19	Do you think the treatment provided by the heath facility is accurate?					
	20	Do you think the service providers in the health facility committed to solve problems?					
	21	Do the service providers loyal to keep secret?					
	22	Does the heath facility provide error free services?					
	23	Does the heath facility provide the promised service dependably and accurately?					
	24	Do you think the heath facility provides Exact information?					

Responsiveness	25	Does the health facility respond immediately for complaints?						
	26	Do you think the health facility concerns for patient?						
	27	Do the services providers in the health facility have a desire to help clients?						
	28	Does the health facility provide fast response for customer requirements?						
	29	Do you think the services providers in the health facility willing to serve the customers?						
	30	Do you think the health facility is trustworthy?						
Assurance	31	Do you think the services providers are consistently polite?						
	32	Does the health facilities personnel are skilled and knowledgeable to answer customers' questions?						
	33	Do you think the Physicians in the health facility concerned to patients?						
	34	Do you think ART pharmacists in the health facility have attitude to patients?						
	35	Do you think ART nurses in the health facility have attitude to patients?						
	36	Do you think lab. Technicians in the health facility have attitude to patients?						
	37	Do you think case managers and adherence supporters in the health facility have attitude to patients?						
	38	Do you think the services providers give individual attention for customers?						
Empathy	39	Do you think the health facility provides its services in convenient time?						
	40	Do you think the health facility provides patient's interest focused service?						
	41	Do you think the health facility responds to specific need of patients?						
	42	Do you think the services providers properly informing and listen to patients?						
	43	Does the health facility use ease way of communication						
	44	Do you think the nurses in the health facility give attention and patience to their client?						
	45	Do you think the services providers understand the specific needs of their customers?						