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St. Mary's University, Ethiopia

ST. MARY'S UNIVERSITY

SCHOOL OF GRADUATE STUDIES

ASSESSMENT OF SERVICE QUALITY OF OUTPATIENTS IN GAMBELA HOSPITAL, GAMBELA REGIONAL STATE, ETHIOPIA

BY

AWOKE TASEW TEBEJE

JUNE, 2016

ADDIS ABABA, ETHIOPIA

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AWOKE TASEW TEBEJE

ADVISOR: SHOA JEMAL (ASSISTANT PROFESSOR)

THESIS SUBMITTED TO ST. MARY'S UNIVERSITY SCHOOL OF GRADUATE STUDIES IN PARTIAL FULFILMENT OF THE REQUIREMENT OF MASTER OF BUSINESS ADMINISTRATION

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APPROVED BY BOARD OF EXAMINERS

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ENDORSEMENT

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

Shoa Jemal _____

Advisor's Signature

St. Mary's University,

Addis Ababa

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Acronyms/Abbreviations

ART	Anti-Retroviral Therapy
BP	Blood Pressure
CASH	Clean and Safe Hospital
CEO	Chief Executive Officer
CSA	Central Statistics Authority
ECG	Echocardiography
EPHI	Ethiopian Public Health Institute
FMOH	Federal Ministry of Health
GTP	Growth and Transformation plan
HC	Health Center
HEW	Health Extension Workers
HP	Health Post
HSTP	Health Sector Transformation Plan
MDG	Millennium Development Goal
NGO	Non-Governmental Organizations
OECD	Organization for Economic Co-operation and Development
OPD	Outpatient Department
OR	Operation Room
RATER	Reliable, Assurance, Tangibility, Empathy and Responsiveness
RHB	Regional Health Bureau
SDG	Sustainable Development Goals
SERVQUAL	Service Quality
TB	Tuberculosis
USA	United States of America
WHO	World Health Organization

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Abstract

The interaction between patients and healthcare providers is critical as it influences patients' satisfaction. Knowing satisfaction level of patients is important to improve quality of services. The objective of this study is to assess service quality of outpatients' in Gambela Hospital, Gambela Regional State, Ethiopia. Gambela Hospital, serving a population of about 690,000 people, is the only one in the region. This is descriptive research with cross sectional design. Structured questionnaire was employed and data was collected from 15 June to 14 July 2015 using SERVQUAL model. Face to face exit interview technique was used from 433 patients/clients on five dimensions of service quality indicators: responsiveness, assurance, empathy, tangibility, and reliability. According to this study finding, there was more expectation than the actual service delivery (perceived quality) in the entire five dimensions of service quality measures. Gap analysis indicated statistically significant association between service quality dimensions and patients satisfaction ($P<0.05$). The analysis showed that patients were not satisfied with the services provided. In the correlation analysis between quality dimensions, all variables were positively correlated. In the same vein, correlation analysis between demographic variables and service quality dimensions indicated that educational status was strongly associated with reliability, empathy and tangibility. This study showed the presence of clear evidence about existence of poor quality of services in Gambela Hospital as shown by the gap analysis. Considering this research findings, there is a need for stakeholders to design high impact strategic interventions and allocation of more resources. Moreover, health care providers in the hospital and the RHB need to design a strategy to capture service quality feedback mechanisms for clients/patients. As this research is client centered, other descriptive and analytical researches focusing on other quality aspects on a wider scale need to be conducted.

***Key Words**: Patient Satisfaction, Service Quality, SERVQUAL, Gambela Hospital, Perception, & Expectation.*

Chapter One

Introduction

This chapter describes the background of the study, definition of terms, statement of the problem, research objectives, research questions, hypothesis, significance of the study, scope of the study, limitations of the study and organization of the study.

1.1. Background of the Study

Quality is one of the key parameters in order to measure the performance of a product or service and ultimately indicates organizational performance (Sanjay Basu et.al, 2012). Customers are the key player, who plays a significant role to measure the quality of the product or services (Sanjay Basu et.al, 2012). However, to measure the quality of services is quite difficult as compared to the product quality due to its intangible nature. The interaction between patients and healthcare providers is critical as it influences patients' satisfaction. This encounter provides the patient with the opportunity to assess and evaluate service quality and conversely it offers the provider an opportunity to manage patients' perceptions and service quality.

Though each group has its own specific and different interests and opinions, the definition, measurement and improvement of health care quality has been a primary issue for health care providers, health service managers and those who commission the service for patients for centuries (WHO, 2008). However, in both developing and developed countries, there has been an implicit understanding that many health services do not meet minimum standards for clinical effectiveness or client satisfaction (WHO, 2008). The quality of medical service is the basis of a health care organization aiming at perfection. Orienting a hospital's goals at quality improvement is the basis of its functioning and requires the involvement of all hospital's employees (Anna R, 2012).

At the foundation of this philosophy lie everyday contacts between medical personnel and patients. To this way of thinking the work of managers of public hospitals ought to aspire; the aim being the ensuring quality of all the processes in an organization. How perfect a health care unit is depends on how patient sees it, and even more on the quality assessment, that is the quality of medical service and the level of attention patient experienced during his/her stay

at a hospital (Anna R, 2012). The service quality model "SERVQUAL"' is based on the assumption that service quality is a function of differences (gaps) between customers' perceptions and expectations along five quality dimensions: reliability, responsiveness, tangibles, assurance and empathy (Parasuraman, Zeithaml and Berry, 2013).

In a study Conducted in Addis Ababa, about 18% of the patients at the public hospitals were very satisfied whilst 48% were just satisfied with the corresponding proportions a bit higher at private hospitals. Self-judged health status, expectation about the services, perceived adequacy of consultation duration, perceived providers' technical competency, perceived welcoming approach and perceived body signaling were determinants of satisfaction at both public and private hospitals (Tayue T, et.al, 2012).

In comparison to other regions in Ethiopia, Gambela Region is one of the least developed regions where access to social services is very limited. The region serves its population which is about 420, 000 host community and 270 000 South Sudanese Refugees through a network of 1 hospital, 32 health centers and 108 health posts. The potential health service coverage of the region reaches 76% (Amref Health Africa, Nov 2014). Infrastructural deficit, lack of human resources, medical equipment, sanitation and hygiene are among the gaps identified during a joint rapid assessment by Gambela RHB and Amref Health Africa (Amref Health Africa, Nov 2014).

. The study was conducted based on modified 'SERVQUAL' model using five service quality dimensions, namely; tangibility, reliability, responsiveness, assurance and empathy. The study focused on Gambela Hospital which is the only one in the region. This study aimed at assessing service quality of outpatients in Gambela Hospital, Gambela Regional State, Ethiopia. This study focused on the client/patients' perspective of service quality in Gambela Hospital.

1.2 Statement of the Problem

In the globalized and liberalized business environment, service sector is encountering tough competition to meet the requirements of the profitable ways of business. This is reflected in an organization's survival in terms of return on investment, retention of customers, acceptance of service and service qualities, development and augmentation of brand image etc. It appears that the driving force towards success in service business is the delivery of high quality

service. In the era of increased competition, enhancement of service quality and its measurement is one of the significant issues for developing efficiency and the growth of business. Quality improvement is the key factor that affects customer satisfaction and increases purchase intention among consumers. Many companies are focusing on service quality issues in order to drive high level of customer satisfaction (Chakraborty.R and Majumdar A, 2011).

Moreover, there is growing consensus that assessment of the quality of hospital services should be based in part, on patients' perceptions of overall care and patient satisfaction. The dominance of market-oriented approaches to reforms in health care delivery and cost, and the emergence of a normative perspective on clinical practice that emphasizes the need to deliver patient-centered care, are also driving attention to patient perceptions of quality (Tirunesh B. 2013). Studies in Ethiopia have reported overall satisfaction levels ranging from 52% to 57%. (Ayele C, 2013).

In a study conducted in developing countries, researchers who directly observed the clinical practice, found that 75% of cases were not adequately diagnosed, treated or monitored though the most frequent explanation for the variation and low-quality care in the developing world was lack of resources (Tayue T, et.al, 2012). One study noted that despite having high expenditure and adequate facilities, patients were often not satisfied with the health care they received. Patients have explicit desires or requests for services when they visit hospitals. However, many cases of patient dissatisfaction can occur due to inadequate discovery of their needs (Tayue T, et.al, 2012).

Gambela hospital is the only hospital serving more than half a million population in Gambela Region including refugees. The high burden created as a result of the influx of the migrants from South Sudan has impacted the quality of health care at Gambela Hospital through additional pressure to the hospital facility, health workers and drug and supplies (Amref Health Africa, Nov 2014).

Gambela hospital has never been studied systematically to assess the quality of health care it has been providing to its clients. Lack of concrete evidence to inform the hospital and stakeholders about the status of quality of care at the hospital was a bottleneck to recommend evidence based interventions. Gambela Hospital Management partnering with Amref Health Africa conducted rapid assessment about the services of the hospital whether it is delivering to

meet acceptable standard of health service delivery. The rapid assessment focused on four areas that have significant impact on the quality of care at the hospital. These were structural capacity, human resources, cleanliness and safety, and medical & logistics (equipment, drugs and other supplies). The rapid assessment indicted that the hospital has few rooms as compared with the number of patients, poor infection prevention practices, shortage of water supply, inadequate sanitation facilities, inadequate number and mix of health professionals, shortage of drugs and medical equipment (Amref Health Africa, Rapid Assessment Report, and Nov 2014).

Considering information from the RHB (Annual Report, 2013/14) and the rapid assessment conducted by Amref Health Africa (Nov 2014), the researcher believed that the hospital was serving under extreme pressure which was beyond its capacity. This capacity constraint definitely might have impacted negatively on the quality of the health service delivery in the hospital. Therefore, issues aforementioned necessitated this study to be conducted in the hospital to assess service quality form the patients' perspective.

1.3. Research Questions

This study aimed at answering the following research questions.

- What is the effect of demographic factors on clients/patients expectation and perception of service quality in Gambela Hospital, Gambela Regional Sate, Ethiopia?
- How different is the outpatients' expectations and perceptions about the quality of health service delivery in Gambela Hospital?

1.4 Research Objectives

1. 4.1 General Objective

- The main objective of the study is to assess service quality of outpatients' on the health service delivery in Gambela Hospital, Gambela Regional Sate, Ethiopia

1.4.2. Specific Objectives

- To assess the effect of demographic factors on outpatients'' expectation and perception of health service delivery in Gambela Hospital, Gambela Regional State, Ethiopia.
- To assess the difference between perception and expectation of the quality of health service delivery in Gambela Hospital, Gambela Regional State, Ethiopia.

1.5 Significance of the Study

This study assessed outpatient satisfaction levels in Gambela Hospital, Gambela Regional State, Ethiopia.

- The results of the study will enable the hospital management improve patients' satisfaction gaps which ultimately advances service quality.
- Policy makers at regional and national level will also use the results of the study for priority setting, resource allocation and programming.
- Moreover, this study will be used as a reference and benchmark for individual researchers and academicians for further descriptive and exploratory studies.

1.6 The Scope of the Study

This study was limited to Gambela Hospital, Gambela Regional State. This was cross sectional survey conducted from August 2014 to July 2015 using SERVQUAL model. The researcher used SREVQUAL Model as this is extensively tested model to be applied to measure service quality in health care settings. The SERVQUAL model has been the major generic model used to measure and manage service quality across different service settings and various cultural backgrounds and is valued by academics and practitioners. Other service quality models were not used in this study. This study employed descriptive method of data analysis. The study did not include other health facilities including: health centers, health posts, private clinics, pharmacies, diagnostics or other health care outlets.

1.7. Definition of Terms

Some technical terms are defined operationally to be used in this research. In this study, the terms need to be understood as defined below.

Reliability- The ability to perform the promised service dependably and accurately

Assurance- The knowledge and courtesy of staff; their ability to inspire trust and confidence

Tangibility- The physical representations or images of the service

Empathy-The caring individualized attention one provides to stakeholders

Responsiveness- Ones willingness to help customers and provide prompt service

1.8 Limitation of the Study

Similar to other researches, this study also suffered from some limitations. First, social desirability bias is likely in this study as the respondents were interviewed in the compound of the health facility. Second, patients may experience a relatively short-lived 'halo effect' whereby they feel more satisfied immediately after their consultation than they do afterwards. Third, it should also be noted that the reliance on the response of parents or caregivers for their children might introduce surrogate bias. Fourth, SERVQAUL model has its own limitations: validity of the model as generic instrument, limitations of gap model, limitation related to its process orientation, non-universality of its dimensions, demotivation of customers because of its frequent measurement, and too much variables to undergo through interviews. Though the above mentioned limitations were encountered, great effort was done to maintain the quality and reliability of the data collected.

1.9. Organization of the Study

The paper was organized in five chapters. The first chapter comprised of introduction including background, definition of terms, statement of the problem, research questions, research objectives, significance of the study, scope of the study, limitations, and organization of the paper. Chapter two included related review of literatures. Chapter three dealt with research design and methodology. Chapter four was about data presentation, analysis and interpretations. The fifth chapter included summary of major findings, conclusions and recommendations.

Chapter Two

Review of Related Literatures

A literature review is a text of a scholarly paper, which includes the current knowledge including substantive findings, as well as theoretical and methodological contributions to a particular topic. Literature reviews are secondary sources, and do not report new or original experimental work. In the same vein, this chapter dealt with the review of related literatures to health care quality and patients' satisfaction in Ethiopia, Africa and the Globe.

2.1 Concept of Service Quality

Services are intangible in nature and thus it is difficult to assess and measure as compared to the products as it is an elusive and abstract concept and thus same for the service quality. Service quality can be defined as conformance to customer specification. Service quality is measured as technical and functional quality; service quality is the difference between customer perceptions and expectations (Irfan et.al, 2012). Whereas another scholar believes that service quality is based on customer perception about the services delivered by the service provider and how these services meets or exceed their expectations and it is purely based on customer judgment (Anthony S .2014). Expectations for the high quality of services had increased in the lives of the people due to increase of economic share of service sector in almost all the economies of the world and it has reached to half sum of Gross National Product's (GNP's). The key strategy for survival and success of any industry or any business is aimed at delivering superior quality of services to their customers (Anthony S, 2014). Customers form service expectations from past experiences, word of mouth and advertisement. In general, Customers compare perceived service with expected service in which if the former falls short of the latter, the customers are disappointed (Irfan et.al, 2012).

2.2 Quality of Health Care

Healthcare is a service that people need but do not necessarily want but, remarkably healthcare is the fastest growing service in both developed and developing countries. The traditional services that once dominated the service sector – lodging, foodservice, and housecleaning have been increasingly supplemented by modern banking, insurance, computing, communication, and other business services. The interest in the measurement of service quality is understandably high in addition to the delivery of higher levels of a service quality

strategy being suggested as critical to service providers' efforts in positioning themselves more effectively in the marketplace (Yogesh Pai.P. et.al, 2012). Service quality has been revealed as a key factor in search for sustainable competitive advantage, differentiation and excellence in the service sector (Manish Joshi, 2014). Besides, it has been recognized as highly important for satisfying and retaining customers. Accordingly the two questions firstly, 'What is perceived service quality? and secondly, 'How must service quality be measured?' have been debated by academics over the last three decades and is of utmost interest. Moreover, the ongoing debate on the determinants of service quality and issue such as 'Is there a universal set of determinants that determine the service quality across a section of services?' remains unanswered. Additionally, there is concern for the identification of determinants of service quality. In a consumer-oriented culture where healthcare delivery is patient-led and commoditized, the patient should be the intermediary of the quality of healthcare (Manish J, 2014).

A wealth of knowledge and experience in enhancing the quality of healthcare has accumulated globally over many decades. In spite of this wealth of experience, the problem frequently faced by policy-makers at country level in both high and low middle income countries is to know which quality strategies, complemented by and integrated with existent strategic initiatives, would have the greatest impact on the outcomes delivered by their health systems. Even where health systems are well developed and resourced, there is clear evidence that quality remains a serious concern, with expected outcomes not predictably achieved and with wide variations in standards of healthcare delivery within and between healthcare systems. Where health systems, particularly in developing countries, need to optimize resource use and expand population coverage, the process of improvement and scaling up needs to be based on sound local strategies for quality so that the best possible results are achieved from new investment (WHO, 2006). As medical science and technology has advanced at a rapid pace, the health care delivery system has floundered in its ability to provide consistently high quality care to all. This implies that increased knowhow and increased resources will not, in themselves, translate into the high quality of health care which populations and individuals rightly expect. How one organizes the delivery of care has become as important. Health expenditure in industrialized countries has doubled in the last 30 years; however, the highest-spending countries are not always those with the best results (WHO, 2006). One reason is the fragmentation of their health care delivery systems. Taking a systems perspective, and

orienting systems to the delivery and improvement of quality, are fundamental to progress and to meeting the expectations of both populations and health-care workers (WHO, 2006).

Several patient characteristics have been associated with patient satisfaction including demographic factors, socio-economic status and general health status. Satisfaction is also influenced by the manner with which health care is delivered. The type of health care setting and characteristics of the medical provider, such as experience, age and gender, are related to patient satisfaction. Some medical-care satisfaction studies showed that people with poor health status had stronger feelings in either direction and that the most satisfied groups were those with good health or those suffering from chronic diseases (Vincent S Fan, 2005). But other studies showed that the patient health status was not an important factor of satisfaction. A study conducted in Kerman hospitals, a city in Southeastern Iran, showed that the effect of age on satisfaction was not significant. But a study on the experience and satisfaction of patients with health care in 2002, pointed out that age is an important factor as in the case of the findings in six regions of Ethiopia (Tayue T, 2012). Ethnic origin has also been found to have a relevance to patient satisfaction. Moreover, the Kerman hospital study cited above showed that patient satisfaction and the sex of the patient have a significant relationship; a similar finding was observed in the Wangmamyen Community Hospital study (Vincent S Fan, 2005).

The level of education and satisfaction were found to have an inverse correlation. For instance, in the study of the six regions of Ethiopia mentioned above, educational status and marital status were observed to be significant determinants of the mean score for patient satisfaction. The study carried out in 1998 on determinants of customer satisfaction with hospitals, showed that perceived competence of the hospital staff and their behavior had the greatest impact on customer satisfaction (Vincent S Fan, 2005). The quality of communication and the general condition of the facilities were also significant but less important in explaining customer satisfaction with hospital services (Vincent S Fan, 2005, WHO, 2006). Besides, a clean and organized appearance of a hospital, its staff, its premises, restrooms, equipment, wards and beds can influence patients' impressions about the hospital. Perceived waiting time is a strong predictor of patient satisfaction. If waiting time is longer than what is expected or considered inappropriate, dissatisfaction will arise no matter how long the actual waiting time. Moreover, many studies have shown that unfulfilled expectations are related to lower patient satisfaction.

However, a study that focused on unmet expectations, reported that there was little support for the relationship between fulfillment of specific expectations and patient satisfaction. Nevertheless, studies indicated that patients have a tendency to infer the level of technical quality based on non-technical aspects (Tayue T. 2012)

Other factors that affect patients' satisfaction are admission procedure, diagnostic services, and employees‟ behavior towards them, cleanliness, nursing care, food, communication and interpersonal manner of the physicians, housekeeping, technical services, accessibility and convenience. Measuring the value of any healthcare resources level refers to healthcare quality. The main aim of healthcare is to provide medical resources of high quality to all. Most people would define healthcare quality as receiving best care possible for one's illness or condition, and for many, it also includes the entire experience of receiving care-including the avoidance of errors or mistakes. Quality measures enable us to see how we perform against benchmark. Quality reflects patient satisfaction, while patient satisfaction depends on several factors mentioned earlier (Dhyana S and Venkatesh R, 2015).

2.3 Rationale of Improving Quality of Health Care

A wealth of knowledge and experience in enhancing the quality of health care has accumulated globally over many decades. In spite of this wealth of experience, the problem frequently faced by policy-makers at country level in both high and low middle income countries is to know which quality strategies, complemented by and integrated with existent strategic initiatives, would have the greatest impact on the outcomes delivered by their health systems. There are two main arguments for promoting a focus on quality in health systems at this time.

- Even where health systems are well developed and resourced, there is clear evidence that quality remains a serious concern, with expected outcomes not predictably achieved and with wide variations in standards of health-care delivery within and between health-care systems.
- Where health systems, particularly in developing countries, need to optimize resource use and expand population coverage, the process of improvement and scaling up needs to be based on sound local strategies for quality so that the best possible results are achieved from new investment (WHO, 2008).

In every country, there is opportunity to improve the quality and performance of the health-care system, as well as growing awareness and public pressure to do so. The decision-making process is intended to help decision makers and managers work through a systematic process which leads towards selecting specific interventions to enhance quality and to improve outcomes and benefits for individuals and populations. The process encourages decision-makers to undertake a comprehensive situational analysis, and to revisit health goals and quality objectives before determining any new quality interventions (WHO, 2006).

Working through the process will create a new agenda for change, which focuses on improving the quality of the health system. The scope of that agenda cannot be anticipated for each application, and will always be the result of judgments and decisions of specific countries. In some cases, the selected interventions will serve to accelerate a process of improvement which is already in progress, and will build on existing systems and organizational models (WHO, 2000).

In other examples, the emerging programme of change might involve a more fundamental reorientation of the whole health system. This could include changes in how the health system is financed; in the system of remuneration of service providers; in the ownership of healthcare delivery organizations; in systems of accountability; and in models of care. Largescale change of this sort is often understood as whole system reform. Thus, the issue for policymakers and managers is to be aware that working through this decision-making process may highlight the need for fundamental reform in their health system (WHO, 2000).

For example, issues of accessibility and equity, which are two dimensions of quality, are system dependent and can hardly be improved without reforming the broader system. Other dimensions of quality, such as patient safety, may not require broad reforms in order to move forward. Sources of reassurance for policymakers are that they control the use of the process, that the process deliberately involves a wide range of stakeholders, and that a natural consensus concerning the scale of change needed in the health system may well emerge (WHO, 2006).

2.4 Evolution of Quality in Health Care System

The fundamental goals of a health care system includes improving health outcome and responding to the legitimate expectations of the clients and health care providers, it requires adequate resources, which are not just financial, but also trained staff, appropriate facilities, equipment and pharmaceuticals. The movement of quality in health care begins in the 1990s. In the US, the modern quality assurance movement in health care began in 1917. Improving quality care over the years evolved from quality control to quality assurance and this in turn evolved to total quality management. Recently the latter has evolved to Population health improvement (WHO, 2000).

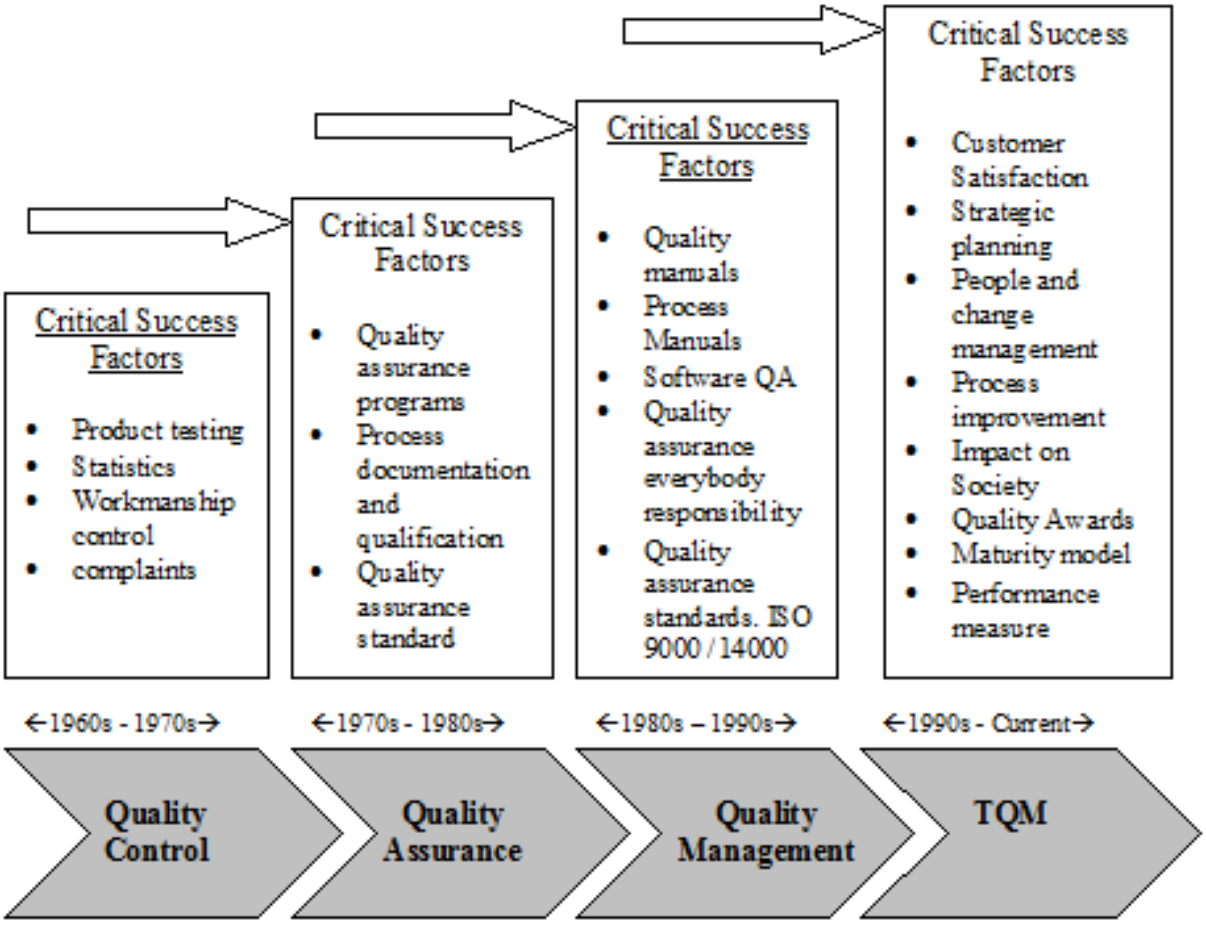

Fig.1. Evolution of Quality

2.5 Patient Centeredness and Quality Improvement Efforts in Hospitals

Patient-centered care is defined as health care that establishes a partnership among practitioners, patients and their families to ensure that decisions respect patients' wants, needs and the preferences and that patients have the education and support they need to make decisions and participate in their own care. This is increasingly being acknowledged as an integral part of evaluating health care. This focus is not entirely new and numerous contributions to the scientific and the grey literature have stressed the need to improve patient-centered care. The reasons for a patient-centered approach from a quality improvement perspective are not always clear to all stakeholders (Yu-Chuan (Jack) Li, 2011).

- As such it might be difficult to realize working towards a common goal. Furthermore, quality improvement projects may put a focus only on a particular aspect of patient centeredness, say humanity of care; an important albeit not the exclusive rationale.

- It appears that many quality improvement initiatives imply that adding a patient survey to existing performance measures will be sufficient to realize patient-centered care. While this may be informative, it may not be very effective. Moreover, there appears to be a selection bias towards a few established instruments capturing generic patient experience or satisfaction and thus ignoring some of the broader challenges in assessing patient centeredness.

- There are some important concerns with regard to common strategies to improve patient centeredness. Patient-centered care: a requirement for quality improvement, improving patients' rights, improving health gain and organizational learning (Yu-Chuan (Jack) Li, 2011).

2.6 Service Quality and Satisfaction

Service quality has been defined as the outcome of an evaluation process where the consumer compares his expectations with the service he has received; or the difference between perceived service and expected service; whereas satisfaction is defined as an evaluative, affective, or emotional response (WHO,2000). Thus the customers can evaluate the object only after they interpret the object. Therefore, satisfaction is the post-purchase evaluation of products or services given the expectations before purchase. Although, the researchers have accepted that service quality and customer satisfaction are two different constructs;

differentiating them remains a challenge. There have been repeated calls for research investigating the relationship between the two constructs: customer satisfaction and service quality. While there are other antecedents to customer satisfaction, namely, price, situation, and personality of the buyer, service quality receives special attention from the service marketers because it is within the control of the service provider, and by improving service quality, its consequence, customer satisfaction could be improved, which may in turn influence the buyer's intention to purchase the service. Accordingly, service quality could be viewed as the whole family picture album, while customer satisfaction is just one (Yogeph P. 2012).

2.7 Framework of Measuring Hospital Service Quality

Several conceptual models have been developed by different researchers for measuring service quality. In order to measure the dimensions of service quality, the most popular measure is SERVQUAL; in line with the propositions put forward by, posited and operationalized service quality as a difference between consumer perceptions of 'what they get and their expectations of 'what they want' (Yogeph P, 2012). During the period 1984-2003, there have been reported nineteen conceptual service quality models and each model is representative of different point of view about services (Yogeph P, 2012). Despite an extensive body of literature on healthcare quality determinants, it could be said that currently, few tools exist for assessing and managing healthcare quality. Sometimes it is possible to borrow items and portions of questionnaires from other sources, especially when a lot of prior questionnaire-based research exists into concepts; and the concept of health care service quality has a lot of prior questionnaire based research. Based on an extensive review of literature on service quality, the critical dimensions of patient perceived hospital service quality have been identified. "SERVQUAL, a standard instrument for measuring functional service quality, is reliable and valid in the hospital environment and in a variety of other service industries" (Wathek S Ramez, 2012).

Due to its intangibility in nature, service quality is difficult to measure and defining the parameter to evaluate the quality of services delivered to the customer was the major issue in the beginning. The first service quality model was presented by Parasuraman and Zeithaml and other authors explored that customer perception about the service quality is influenced by five 'gaps' and it is also known as 'gap' model. (Chingang N & Lukong P, 2010).

Gap 1 shows the difference between customer expectations and management perception of customer expectations.

Gap 2 is the difference between management perceptions about service quality and service quality specifications.

Gap 3 is the difference between service quality specifications and service quality delivery.

Gap 4 is the difference between service delivery and external communication to customers and

Gap 5 is the difference between expected and perceived service quality (S.M. Irfan, et.al, 2012).

A comprehensive literature review about the service quality was done by Seth, Deshmukh [26] He pointed out 20 service quality models to measure the service quality which includes: Gronroos, "technical and functional quality model", Cronin Jr and Taylor "performance only model (SERVPERF)" and Parasuraman, Zeithaml "Gap Model" which are frequently found in the literatures. Among all these service quality models, SERVQUAL models was the only model that is frequently used in almost all type of service industries; like banks and credit cards companies, hospitality industry, airline industry, libraries and healthcare sector. It has been observed from the literature that SERVQUAL is also considered as most adoptable model in order to measure the service quality of healthcare sector. Earlier, service quality was measured by comparing customer expectations with customer perceptions on the basis of ten dimensions which includes; reliability, tangibility, communication, security, credibility, competence, understanding, access, understanding/knowing customers, responsiveness. Further this model was refined by Parasuraman, Berry and service quality can be measured on the basis of five dimensions; reliability, tangible, responsiveness, assurance and empathy and these five dimensions were further assessed by 22 items (A.Parasurman and A Zeithaml, 1988).

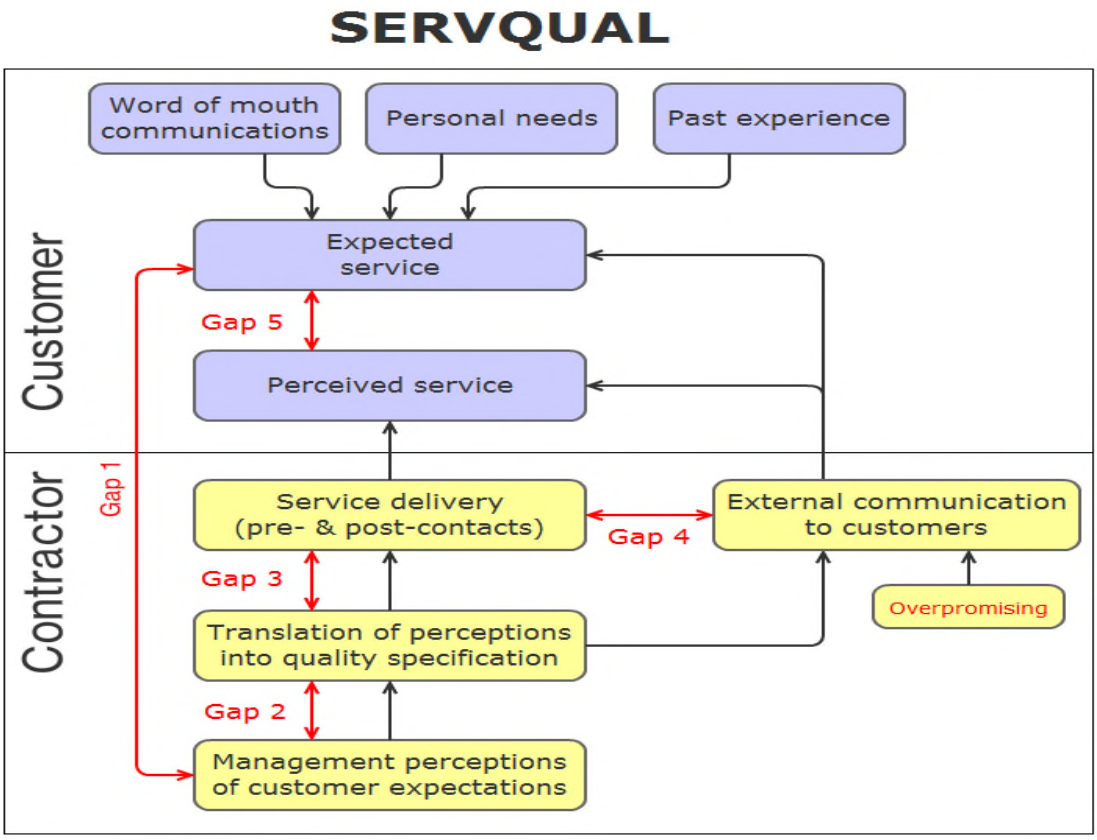

Fig. 2: Gaps in expected and perceived service quality of care

2.8 Conceptual Framework

After going through various literature reviews and available evidences, the researcher developed the following conceptual framework for this study.

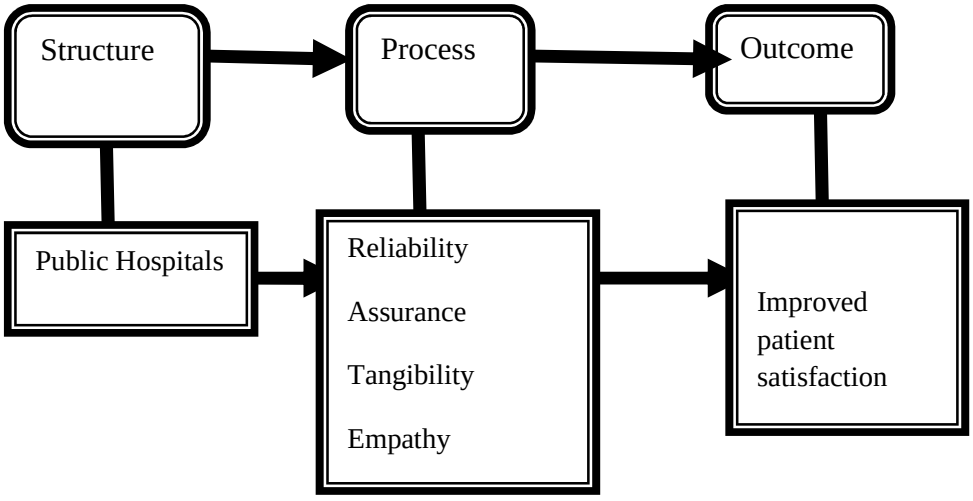

Fig. 3. Conceptual Framework for Client satisfaction and service quality

Chapter Three

Research Design and Methodology

This study is aimed at assessing patient satisfaction and measuring the service quality of Gambela Hospital based on patient's perceptions. This chapter is about research design and methodology which encompasses: research design, target population, sampling procedure, sample size determination, sources of data, methods of data collection, reliability test, method of data processing and analysis, variables of the study and ethical considerations.

3.1. Research Design

Research design refers to the overall strategy that was chosen to integrate the different components of the study in a coherent and logical way, thereby, ensuring that the research problem was effectively addressed; it constitutes the blueprint for the collection, measurement, and analysis of data. This particular study is descriptive research using quantitative data (Likert's scale). In this study, cross sectional survey, using a modified SEQUAL model having structured questionnaire, was used to collect information on outpatients visiting the hospital during the data collection period (using face to face exit interviews). This SERVQAUL Model was used as this has been tested extensively to be applicable to assess service quality in health care facilities. Moreover, this study focused on client centered-quality measure which made the model more appropriate. Descriptive statistics and gap analysis was used as the intention of this study was to identify existence of correlation between demographic factors and quality dimensions versus service quality.

3.2. Target Population

The target population was the total group of individuals from which the sample was drawn. In this study, the target population was the patients/clients who visited Gambela Hospital outpatient departments from 15 June to 14 July 2015.

3.3. Sampling Procedure

In this research, a random sampling technique was used to select the first case through lottery method. As a result, every third patient/client who visited the hospital was selected and got interviewed at exit. Face to face exit interviews, using structured questionnaire by

interviewers, with outpatients who visited the hospital (outpatient departments), were included in the study.

3.4. Sample Size Determination

EPI-INFO window version 3.5.1 was used to calculate the sample size using single population proportion formula based on an assumption that 50% of satisfaction in Gambela hospital; as there was no any previous study conducted and less comparability with other studies; with a margin of error 5%, standard score corresponding and 95% certainty. The calculated total sample size was 384 but adding a non-response rate of 13%.making the total sample size 433.

$$N = \frac{(Z\alpha/2)2 \times p\,(1-p)}{d2}$$

Where

N = Sample size

384+49(non-response) =433

Zα/2 = Confidence level at 95% = 1.96

P = Proportion of dissatisfaction= 50%

d = margin of error of 5%

Accordingly, the total sample size was 433 including the non-response rate. The non-response rate has been set at 13% intentionally to minimize risk as there was also risk of language barrier which could made the interview difficult.

3.5. Sources of Data

Gambela Hospital is the only hospital in Gambela Regional State and it is selected automatically where most clients access curative and preventive health service. The Hospital is selected for convenience to link it with a project being implemented by Amref Health Africa. Primary data was collected through conducting face to face exit interviews from clients (outpatient departments).

3.6. Method of Data Collection

Data was collected using a SERVQUAL model standard questionnaire consisting of two parts. The first part included questions regarding the patients' demographic characteristics such as age, gender, marital status and education level. The second part included 22 items to measure the patients' expectations and perceptions of each of the five dimensions of service quality as follows: tangibility (4 items), reliability (5 items), responsiveness (4 items), assurance (4

items), and empathy (5 items). A five-point Likert scale was used to ask respondents for scoring (items) ranging from 1 = strongly disagree to 5 = strongly agree.

One day training was conducted for data collectors and supervisors on the data collection instruments. The English version questionnaire was translated to Amharic language. The tool was pretested and modified according to the context and interview was made in Amharic language. For non-Amharic speakers, local translators were recruited. Data was collected by trained diploma health workers having previous experience on data collection. Supervision was conducted by two degree holders (staff of Amref Health Africa) on daily basis. At the end of each day, review of data collection was checked by supervisors assigned for this purpose-for the appropriate recording of all entries by the data collectors by randomly checking completed questionnaires.

3.7. Reliability Test

Cronbach's alpha is a measure used to assess the reliability, or internal consistency, of a set of scale or test items. In other words, the reliability of any given measurement refers to the extent to which it is a consistent measure of a concept, and Cronbach's alpha is one way of measuring the strength of that consistency. Reliability test has been done to check that data was free from random error. For any measurement to be valid, it must demonstrate reliability test (Frey et.al, 2002). In order to be reliable the Cronbach's alpha should exceed the threshold of 0.70. The Cronbach's alpha in this analysis was 0.875 which means the internal consistency is good.

Table 1: Interpretation of Cronbach's alpha (Chelsea Goforth, University of Virginia Library (November 2015)

Cronbach's alpha	**Internal consistency**
$\alpha \geq 0.9$	Excellent
$0.9 > \alpha \geq 0.8$	Good
$0.8 > \alpha \geq 0.7$	Acceptable
$0.7 > \alpha \geq 0.6$	Questionable
$0.6 > \alpha \geq 0.5$	Poor
$0.5 > \alpha$	Unacceptable

3.8. Method of Data Processing and Analysis

Being assisted by statistician, data was entered, coded and analyzed with SPSS version 20.0. Data was tested by using statistical inference; the paired t-test was conducted to determine whether there were differences between the overall mean. Frequency tables were calculated. Correlation between demographic factors versus expectation and perception was analyzed. SERVQUAL score was calculated to evaluate expected and perceived service with respect to the following measures: tangibility, reliability, responsiveness, assurance, and empathy. The SERVQUAL scores of each service dimension were obtained by calculating the difference between the perceived and expected service scores. SERVQUAL score = Perception score – Expectation score. Correlation between quality dimensions was analyzed as well.

In the expectations section, patients answered to the questions about the ideal or desirable status of services and in the perception section, they answered to the questions about the current status of services. To determine the quality gap, the scores of patients' perceptions of the quality of services provided were compared with the scores of patients' expectations of service quality. If the difference between the patients' perceptions and expectations was positive, it would indicate that the provided services for the patients had met their perceptions and hence clients were satisfied. If it was negative, it would indicate that the provided services for the clients had been less than their expectations and their satisfactions of the services provided were poor. Finally, if there was no any difference between the patients' perceptions and expectations, it would indicate that the provided services were at the level of patients' expectations.

3.9. Variables of Study

In this study, the main variable of the study are: Service Quality, Demographic variables, Reliability, Assurance, Tangibility, Empathy and Responsiveness

3.10. Ethical Considerations

Approval for conducting this study was received from the Research and Publication Office of the Saint Mary’s University and Gambela Regional Health Bureau. Permission was obtained from Gambela Hospital. Verbal consent was obtained from all participants of the study and all of them were assured of the confidentiality of their responses.

Chapter Four

Data Presentation, Analysis and Interpretation

Data analysis and interpretation is the most important part of this paper. This chapter manly dealt with the data presentation, and analysis of sociodemographic factors, descriptive analysis, correlations and discussion.

4.1. Frequency Distribution

Table 2. Socio-demographic Characteristics of Respondents (n = 433), Gambela Hospital, June to July 2015

Characteristics	*Number (N)*	*Percentage (%)*
Gender		
Male	174	40.2
Female	259	59.8
Age		
18-29	273	63.0
30-39	123	28.4
40-49	26	6.0
>=50	11	2.5
Marital Status		
Single	119	27.7
Married	280	64.6
Divorced	21	4.8
Widowed	12	2.7
Educational Level		
Illiterate	38	8.8
Read and write	22	5.1
Primary	123	2.8
Secondary school	131	30.3
Diploma	96	22.2
First degree and above	19	5.3
Total	433	100

A total of 433 clients/patients were interviewed as study subjects which accounted for 100% response rate. As presented in Table 2, the result showed that 259 (60%) of the participants were females, 273 (63%) were young people aged 18-29 years old, married 280 (65%). In terms of educational status, 131 (30.3%) were secondary school graduates and 96 (22.2%) were diploma holders whereas only 38(8.8%) were illiterate.

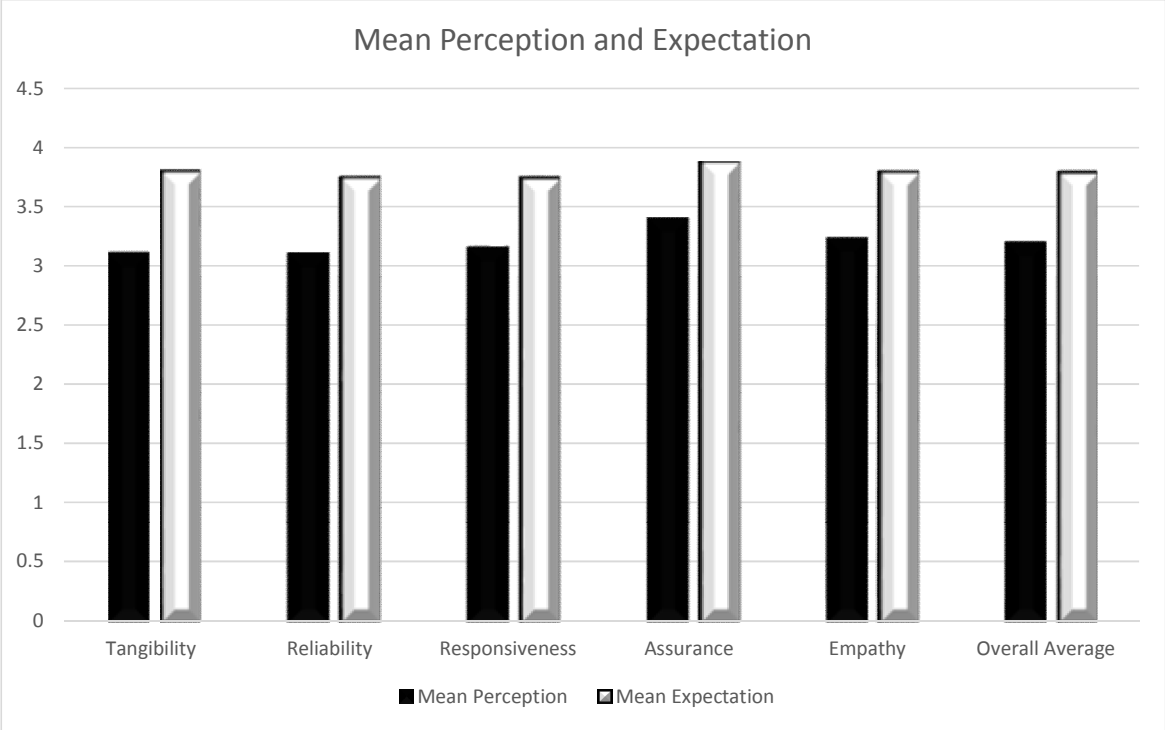

Figure 4: Comparison of Average Expectation versus Average Perception by Respondents, Gambela Hospital, June to July 2015

The above figure showed that in all the five dimension of service quality, there was more expectation on the service delivery than the actual perceived service delivery at Gambela Hospital. The result indicated that there was relatively high expectation of service quality in Gambela Hospital as compared to the perceived services provided. This was also true for the overall average perception and expectation whereby mean expectation is more than perception.

4.2 Test of Normality

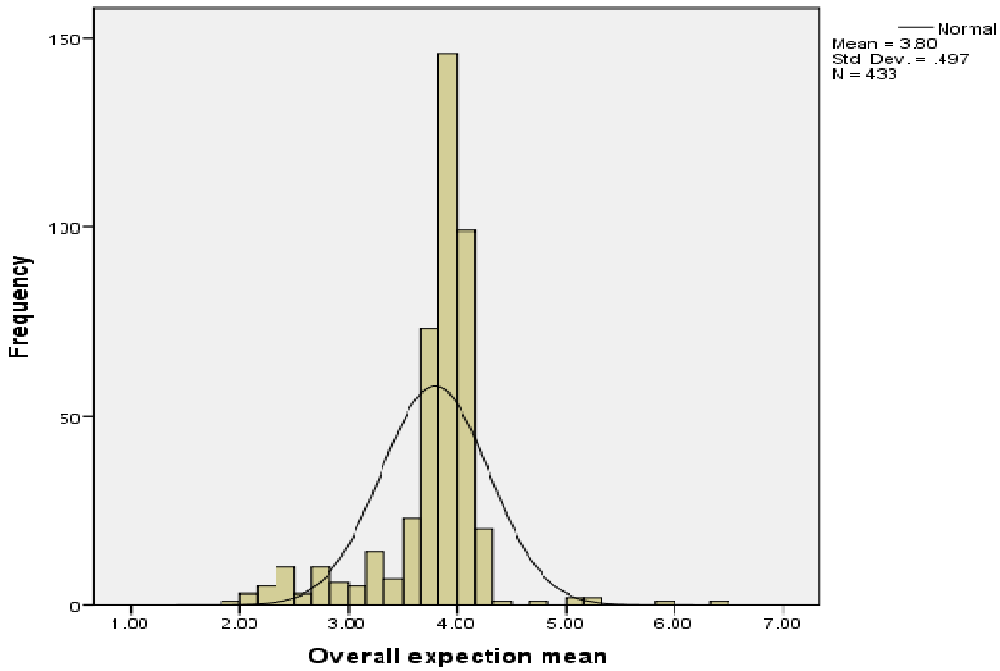

Figure. 5. Normal Probability-Test of normality for over all expectation mean

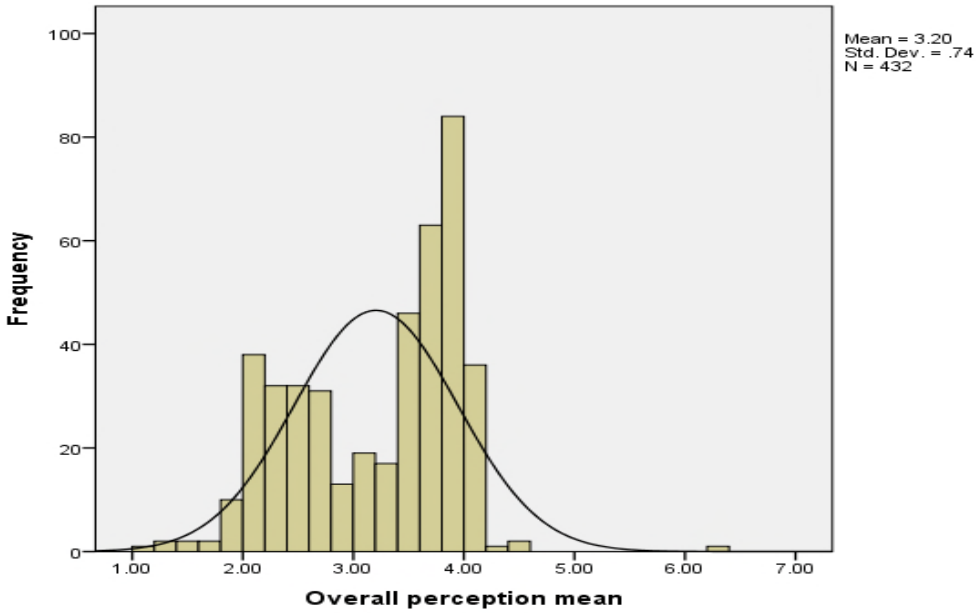

Fig. 6. Normal Probability- Test of Normality for Overall Pereception Mean

Probability Test of normality for both overall expectation and perception indicated that the data is uniformly distributed. Thus, mean was considered for statistical analysis for both gap analysis and correlation computations.

4.3 Gap Analysis

Table 3. Mean Patient expectation and Perception of the quality of services in Gambela Hospital

S.N	Statements	Mean Perception (P)	Mean Expectation (E)	P-E	P. Value
I	**Tangibility (Average)**	**3.120**	**3.810**	**-0.690**	**0.000**
1	Q1	3.210	3.840	-0.630	0.000
2	Q2	2.810	3.620	-0.810	0.000
3	Q3	4.000	4.150	-0.150	0.000
4	Q4	2.410	3.610	-1.200	0.000
II	**Reliability (Average)**	**3.116**	**3.756**	**-0.640**	**0.000**
5	Q5	3.140	3.750	-0.610	0.000
6	Q6	3.060	3.780	-0.720	0.000
7	Q7	3.290	3.920	-0.630	0.000
8	Q8	3.260	3.810	-0.550	0.000
9	Q9	2.830	3.520	-0.690	0.000
III	**Responsiveness**	**3.165**	**3.753**	**-0.588**	**0.000**
10	Q10	3.210	3.600	-0.390	0.000
11	Q11	2.720	3.640	-0.920	0.000
12	Q12	3.380	3.970	-0.590	0.000
13	Q13	3.350	3.800	-0.450	0.000
IV	**Assurance (Average)**	**3.410**	**3.893**	**-0.483**	**0.000**
14	Q13	3.310	3.800	-0.490	0.000
15	Q14	3.450	3.820	-0.370	0.025
16	Q15	3.620	3.970	-0.350	0.001
17	Q16	3.260	3.980	-0.720	0.000
V	**Empathy (Average)**	**3.244**	**3.802**	**-0.558**	**0.000**
18	Q17	3.090	3.940	-0.850	0.000
19	Q18	3.460	3.820	-0.360	0.000
20	Q19	3.190	3.640	-0.450	0.000
21	Q20	3.230	3.720	-0.490	0.000
22	Q21	3.250	3.890	-0.640	0.000
	Overall Average	**3.210**	**3.800**	**-0.590**	**0.000**

The gap analysis table above indicated that the differences for all the 22 items of perception and expectation is negative (P<0.05). The average difference for the 5 quality dimensions was also negative (P<0.05). This implied that the gap analysis showed strong differences between perception and expectation. This table showed that there was statistically significant difference between all the service quality dimensions and constructs.

Table 4: Summary of Mean Service Gaps among the service quality dimensions

Service Quality Dimensions	**Mean difference**	**SD**	**T**	**Significance (P-value)**
Tangibility P- Tangibility E	-0.69387	0.80143	-17.995	0.000**
Reliability P- Reliability E	-0.63900	0.99644	-13.329	0.000**
Responsiveness P- Responsiveness E	-0.58835	1.16970	-10.454	0.000**
Assurance P- Assurance E	-0.48062	1.28737	-7.742	0.000**
Empathy P- Empathy E	-0.55736	0.93795	-12.322	0.000**

The above table showed that there was significant difference between average perception and expectation for the 5 quality dimensions. This indicated poor service quality in the hospital. The gaps between average perception and expectations for all the five quality dimensions were statistically significant (P<0.05).

4.4 Correlations

Table 5. The Correlation between the Patients' Demographic Characteristics and the Means of Gaps of Five Dimensions of Service Quality in Gambela Hospital June to July 2015

Variables		Tangibility	Reliability	Responsiveness	Assurance	Empathy	Over all perception p-value
Gender	Male	-.7198	-.6184	-.5532	-.3794	-.6039	.487
	Female	-.6741	-.6500	-.6096	-.5483	-.5237	
	P-value	.562	.747	.624	.184	.387	
Marital Status	Single	.466	-.6769	-.5147	-.3468	-.4870	.152
	Married	.000	-.6348	-.6431	-.5457	-.6108	
	Widowed	-.5952	-.4286	-.2619	-.3810	-.3905	

	Divorced	.92600	1.08544	1.01760	.76649	.44803	
	P-value	.167	.433	.863	.634	.655	
Age category	18-29	-.7039	-.6319	-.5747	-.4802	-.4869	.466
	30-29	-.6783	-.6770	-.6407	-.4835	-.7174	
	40-49	-.8558	-.5923	-.7308	-.5577	-.6615	
	≥50	-.6942	-.6397	-.5899	-.4840	-.5600	
	P-value	0.496	.915	.834	.947	.125	
Education Levels	Illiterate	-.5066	-.8000	-.6579	-.5724	-.7211	**000***
	Certificate	-.9545	-.7182	-.7386	-.4659	-.5182	
	elementary school	-.6362	-.4850	-.3740	-.4993	-.4016	
	secondary school	-.5897	-.5950	-.6183	-.3692	-.5097	
	Diploma	-.8184	-.6321	-.6833	-.4368	-.6463	
	first degree	-1.1579	-1.3895	-.8684	-1.0139	-.9889	
	Second degree and above	-1.0625	-1.4500	-1.1250	-1.3750	-1.5000	
	P-value	**.01****	**.006****	.297	.389	**.033****	

As presented in Table 4, among the patients' demographic characteristics versus the five dimensions of service quality, only the difference between the patients' education levels and tangibility, reliability and empathy dimensions were statistically significant ($P < 0.05$). In other words, the less educated the patients were, they had less expectation for service quality (tangibility, reliability and empathy) as compared with clients having higher educational status.

Table 6: Correlations among Quality Dimensions of expectation

Control Variables		Tangibility E	Reliability E	Responsiveness E	Assurance E	Empathy E
Tangibility E	Correlation	1.000	0.522	0.378	0.288	0.490
	Significance (2-tailed)	.	0	0	0	0
	Df	0	423	423	423	423
Reliability E	Correlation	0.522	1.000	0.388	0.287	0.485
	Significance (2-tailed)	0	.	0	0	0
	Df	423	0	423	423	423
Responsiveness E	Correlation	0.378	0.388	1.000	0.285	0.415
	Significance (2-tailed)	0	0	.	0	0
	Df	423	423	0	423	423
Assurance E	Correlation	0.288	0.287	0.285	1.000	0.347
	Significance (2-tailed)	0	0	0	.	0
	Df	423	423	423	0	423
Empathy E	Correlation	0.490	0.485	0.415	0.347	1.000
	Significance (2-tailed)	0	0	0	0	.
	Df	423	423	423	423	0

The table above showed positive correlation among the 5 quality dimensions of expectation. This table indicated that expectation for one quality dimension affects the other positively. Strong correlation was found between tangibility and reliability. In relative terms, there was weak correlation between assurance and responsiveness.

Table 7. Correlations among quality Dimensions of Perception

Control Variables		Tangibility P	Reliability P	Responsiveness P	Assurance P	Empathy P
Tangibility P	Correlation	1.000	.575	.498	.370	.581
	Significance (2-tailed)		.000	.000	.000	.000
	df	0	423	423	423	423
Reliability P	Correlation	.575	1.000	.522	.423	.726
	Significance (2-tailed)	.000		.000	.000	.000
	df	423	0	423	423	423
Responsiveness P	Correlation	.498	.522	1.000	.420	.573
	Significance (2-tailed)	.000	.000		.000	.000
	df	423	423	0	423	423
Assurance P	Correlation	.370	.423	.420	1.000	.491
	Significance (2-tailed)	.000	.000	.000		.000
	df	423	423	423	0	423
Empathy P	Correlation	.581	.726	.573	.491	1.000
	Significance (2-tailed)	.000	.000	.000	.000	
	df	423	423	423	423	0

The table above showed positive correlation among the 5 quality dimensions of perception. Strong correlation was found between empathy and reliability. In relative terms, there was weak correlation between assurance and tangibility. From this table, one can say that perception for one quality dimension affects the other positively.

4.5. Discussion

Test of normality was done and the result showed normal distribution. Frequency distribution analysis was done and about 433 respondents were interviewed. The majority of the respondents were females and between 18-39 years of age and only 8% were illiterate. The gap analysis between perception and expectation indicated that all the values for the 22 constructs and for the 5 average quality dimensions were negative. This meant that patients were less satisfied with the services provided which did not meet their expectations. In statistical terms, the difference was significant for all constructs, quality

dimensions and average quality (P<0.05). In the correlation analysis, association was found between educational status versus three of the quality measures: tangibility, reliability and empathy (P<0.05). Level of education had inverse relationship with service satisfaction (the higher the educational level clients have, the higher demand or expectation to the quality of services). This is due to the fact that educational level improves as the demand for service quality increases. However, with lower education level, the exposure is limited and as a result the expectations will be low; patients/clients get satisfied with minimal support unlike with the well-educated ones.

Similarly, correlation analysis was conducted between quality dimensions and it was found that there was strong correlation between them. This indicated that perceptions and expectations for one of the quality dimensions affects others.

The use of a variety of measures of service quality as critical indicators of both organizational performance and general customer satisfaction is widely accepted and has given rise to considerable empirical research. Organizations operating within the public sector healthcare organizations, local government, police, emergency services, government agencies-have come to realize that customer service and quality are critical strategic issues starting the late 1990s. However, it is also widely recognized that such public sector organizations face particular difficulties in measuring service quality. Health services that are provided in health care institutions need to be satisfactory so as to provide the intended effects of the services (WHO, 2008). One of the methods of quality is client centered approach using SERVQUAL tool as used in this study.

Similar study in Bahrain ((Wathek S Ramez, 2012) showed us that the five quality dimensions were significantly associated with service quality (P<0.05) which is consistent with this study. Another study conducted in Addis Ababa (Tayue T, et.al, 2012) indicated that educational status was a strong predictor of client satisfaction (P<0.05) which is consistent with this study. Patient Satisfaction and Service Quality study in Public Hospitals in Pakistan (S.M. Irfan et.al, 2012) showed that assurance was significantly associated with client satisfaction (P<0.05) whereas as other quality dimensions of SERVEQUAL were not significantly associated which is not consistent with this study. In a hospital service quality study using SERVQUAL method conducted in Ghana, Sunyani

Regional Hospital, (*Augustine* A, et.al, 2014) indicated that three of the five quality indicators: reliability, assurance and responsiveness were significantly associated with client satisfaction. A similar study in India (Ranajit C. and Anirban M., 2011) indicated that the five quality measures were significantly associated with perception of service quality ($P<0.05$). Research findings on patient satisfaction with nursing care at a university hospital in Turkey (Uzun. O, 2001) indicated that age, gender, education level and all the five dimensions of service quality were significantly associated with client's satisfaction ($P<0.05$). In simple correlation, this study was found to be consistent with other studies globally showing significant associations between service quality and all the five quality dimensions of SERVEQUAL.

Quality is becoming a top agenda in the service industry. The health care industry is not an exception. A number of studies on service quality have been conducted in many part of the country mainly by (Tayue T, et.al, 201) in Addis Ababa, (Waju B.et.al, 2011) in Jimma and (Gebremedhn G.) in Gondar Universities; however, all the studies focused on the service provider perspective. This client-centered study is the first in its kind in Gambela Hospital which will be important to design appropriate strategies to advance health service quality in Gambela Regional Sate.

Gambela Regional state being one of the developing regional states in the country with less developed health system, the findings are as per the expectation of the researcher. As a matter of fact, quality and equity are among the transformation agendas of the Growth and Transformation Plan II (GTP II) and the Health Sector Transformation Plan II (HSTP II) f Ethiopia. Both strategic documents capitalized on ensuring quality and equity with especial focus on addressing regional disparity. There is good opportunity to improve quality as clearly indicated in the HSTP II strategic document.

In a nutshell, the correlation analysis of this study showed that perception (satisfaction) is affected by educational status having inverse relationship. The gap analysis of the five quality dimensions of SERVQUAL (Reliability, Assurance, Tangibility, Empathy and Responsiveness) were significantly associated with service quality ($P<0.05$). Correlation analysis between the service quality dimensions showed strong association among them ($P<0.05$).

Chapter Five

Summary, Conclusions and Recommendations

Chapter five included summary of major findings of the study, conclusions and recommendations. This chapter summarized important findings and put action points to address the service quality gaps.

5.1. Summary of Major Findings

This study is descriptive cross sectional study designed to assess patient satisfaction levels in Gambela Hospital. The hospital is found in Gambela Regional State where there are many bottlenecks impeding service quality. In this regard, no other study was conducted in these thematic focus in the region which resulted in information gap for evidence based programming and interventions. Patient centered quality studies have been done by many researchers across the globe. Many studies showed strong correlation between the five quality predictors: reliability, assurance, tangibility, empathy and responsiveness and patient satisfaction which is consistent with this study. In this study, the gap model showed statistically significant differences between service quality dimensions and patient satisfaction. This study revealed strong correlations between educational status and patient satisfaction.

In a nutshell, the results of this research were found to be consistent with other studies in which the five quality dimensions were significantly associated with patient satisfaction. At the same time, a rapid assessment conducted by Amref Health Africa indicated that there were poor quality services related to structural health system issues in the hospital. However, there was no information on service quality from the perspective of clients using patients' lenses. This research therefore, identified the presence of bottlenecks hindering patient satisfaction which warrants operationalization of appropriate measures from the government and development partners.

5.2. Conclusions

One of the most important indicators of quality service is evaluating client's satisfaction. From the findings, we could conclude patient satisfaction in Gambela Hospital is significantly hampered. Due to the fact that there was relatively high expectations in

Gambela Hospital, the perception they had reported was low which resulted in statistically significant associations. Among the demographic factors, educational status showed strong correlations with reliability, assurance and tangibility.

The absence of patient satisfaction in the health care delivery system in Gambela Hospital impacted negatively the health care seeking behavior which ultimately affected health outcomes in the area. The current health service delivery quality gaps in Gambela Hospital cannot be extrapolated to other similar hospitals in Ethiopia.This is because the sociocultural contexts and political landscapes are different from region to region which made it difficult to extrapolate to other regions. Based on the findings of this study, to improve the patient satisfaction, there is a need to conduct periodic assessment focusing on patients' needs. It is important that those recommendations from the assessment need to be implemented. Patient satisfaction could be partly addressed by improving service provision at the hospital through improving the client perspective quality dimensions. This study could make contributions by highlighting client's satisfaction in a public health facilities to serve as a benchmark for other studies.

Possible reasons for the lack of patient satisfaction in Gambela hospital could be inadequate cleanness of the hospital, shortage of water, absence of medical equipment, drugs and supplies, lack of rooms for outpatient services, shortage of competent health professionals, high influx of refugees from south Sudan overburdening the hospital (Rapid assessment, Amref Health Africa, Nov 2014). Another reason could be lack of leadership capacity at the regional level to provide quality services and monitor them periodically. Lack of budget for the health sector and the absence of community and social health insurance scheme could create financial pressure for the hospital to respond to the needs of the community. The fact that the hospital is serving beyond its capacity for more than half a million host community and refugees could hamper quality services leading to dissatisfaction of patients.

Major reason of this poor quality is due to lack of implementation of quality management systems in the healthcare sector. Total quality management (TQM) has been widely implemented as a strategic tool to gain competitive edge in many countries in the world. However, Ethiopia, is still lagging behind to adopt TQM in almost all the sectors particularly in the public healthcare sector which is facing serious quality issues.

Therefore, it is high time to initiate TQM philosophy in the healthcare sector to be adopted to deliver superior quality of service and boost quality service and gain customer satisfaction.

5.3. Recommendations

The study findings suggest that the following measures to be taken by different stakeholders to improve patients' satisfaction at public health facilities. Below are some recommendations for interventions at various levels of the government and stakeholders:

1. Gambela Regional State, RHB and Gambela Hospital

a) Infrastructural deficit is one of the bottlenecks to provide quality health services and improve patient satisfaction. Therefore, the Regional Government need to design a strategy to build additional buildings in Gambela hospital and other district hospitals. Strengthening the referral mechanism is also very imperative to implement as it reduces patient overload to Gambela hospital.

b) Human resource shortage impacted service quality significantly. Therefore, deployment and retention of adequate health workforce need to be designed by the Regional State, RHB and the Hospital.

c) Competency of service providers is very important element in service provisions. Therefore, effort should be made to improve quality of health care services through in-service training, mentoring and coaching.

d) Service quality assessment is very imperative in service sectors such as hospitals. To this end, periodical assessment of patients' satisfaction should be taken as routine activity to implement quality improvement interventions.

2. FMOH and Development partners

a) Access and equity are important factors for service quality. Thus, budget need to be allocated to improve the service quality in this developing regional states like Gambela to reduce reginal disparities.

b) The crisis in South Sudan is causing massive influx of immigrants to Gambela region resulting in huge burden to Gambela Hospital. This is affecting the quality of service provision for the host community in Gambela Regional State. Therefore, FMOH and development partners need to have concerted effort to respond to the refugee crisis through strengthening clinics in the refugee sites to reduce massive patient flow to the sole hospital in the region.

c) Gambela Regional State is one of the developing regions in the country having multifaceted problems in providing quality health service. Hence, support should be provided to Gambela Hospital both technically and financially to address health care quality and access issues.

3. Further research

a) This research dealt only the client/patient perspective of qualities. Therefore, conducting other descriptive or exploratory studies to identify health system related root causes of health care service delivery bottlenecks in Gambela Hospital is imperative.

To end, as the government hospitals appear to be an important provider of health services in Ethiopia, care should be taken to facilitate the implementation of policies and strategies that significantly promote the functioning of quality care health service provisions.

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Appendices

Appendix A: Data collection materials

Part I - Background Information

This section of the questionnaire refers to background of the respondent.

1. Gender: ☐ Male ☐ Female

1.2 Age: ☐ 18-29 years old ☐ 30-39 years old
☐ 40-49 years old ☐ 50 years old and above

1.3 Marital Status: ☐ Single ☐ Married
☐ Divorced ☐ Widowed

1.4 Educational level
☐ Illiterate ☐ Primary school
☐ Certificate ☐ Diploma
☐ First degree ☐ Second degree and above

Part II. Customers' Expectation

The following tables contain the feature that relate to your feelings about the service quality you expect from Gambela Hospital. Please show the extent in each feature that is close to your view of service quality's expectation.
1= Strongly Disagree 3= Neither Agree nor Disagree
2= Disagree 4= Agree and 5= Strongly Agree.

S/No	Service Quality Dimensions	Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree
	Tangibility					
1	I expect that Gambela Hospital have modern equipment.	1	2	3	4	5
2	I expect that equipment and supplies associated with the service are visually appealing at the hospital	1	2	3	4	5

3	I expect that hospital staff appear neat.	1	2	3	4	5
4	I expect that physical environment of the hospital should be clean.	1	2	3	4	5
	Reliability					
1	I expect that when the hospital promises to do something by a certain time, they do so.	1	2	3	4	5
2	I expect that when a customer has a problem employees show a sincere interest in solving it.	1	2	3	4	5
3	I expect that the hospital perform the service right the first time.	1	2	3	4	5
4	I expect that the hospital provides their services at the time they promise to do so.	1	2	3	4	5
5	I expect that the hospital insists on error-free records.	1	2	3	4	5
	Responsiveness	1	2	3	4	5
1	I expect that employees of the hospital tell me exactly when the service will be performed	1	2	3	4	5
2	I expect that employees give me prompt service to customers	1	2	3	4	5
3	I expect that employees are always willing to help customers	1	2	3	4	5
4	I expect that employees in of the hospital are never too busy to respond to my request.	1	2	3	4	5
	Assurance					
1	I expect that behavior of employees in of the hospital instills confidence in me.	1	2	3	4	5
2	I expect that I feel safe in their transactions with front line employees	1	2	3	4	5
3	I expect that front line employees are polite.	1	2	3	4	5

4	I expect that employees have the knowledge to answer my questions.	1	2	3	4	5
	Empathy					
1	I expect that of the hospital give me individual attention.	1	2	3	4	5
2	I expect that the hospital has operating hours that are convenient to all their customers	1	2	3	4	5
3	I expect that the hospital has employees who give me personal attention.	1	2	3	4	5
4	I expect that employee of the hospital has my' best interest at heart.	1	2	3	4	5
5	I expect that the employees understand my specific needs	1	2	3	4	5

Part III. Customers Perceptions

The following statements deal with the perceptions of service experienced in Gambela Hospital. Please, show the extent to which these statements reflect your perception of service in Gambela hospital.

No	Service Quality Dimensions	Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree
	Tangibility					
1	The hospital has up-to-date equipment.	1	2	3	4	2
2	Physical facilities (including medical equipments, patient beds, rooms, etc) are visually appealing.	1	2	3	4	5
3	Employees are well dressed and appear neat.	1	2	3	4	5
4	The physical environment of the hospital is clean	1	2	3	4	5
	Reliability					
1	When employees promise to do something by a certain time, they do.	1	2	3	4	5
2	When a customer has a problem, they show a sincere interest	1	2	3	4	5
3	The hospital performs the service right the first time	1	2	3	4	5

4	Front line employees in the hospital provide the service at the time they promised to do so.	1	2	3	4	5
5	The hospital keep their records accurately	1	2	3	4	5
	Responsiveness					
1	Employees make information easily obtainable by customers	1	2	3	4	5
2	Employees give prompt service to customers.	1	2	3	4	5
3	Front line employees are always willing to help customers.	1	2	3	4	5
4	The behavior of employees instill confidence in customers	1	2	3	4	5
	Assurance	1	2	3	4	5
1	Customers feel safe in their transactions with employees in the sales office	1	2	3	4	5
2	Employees are polite with customers.	1	2	3	4	5
3	Employees of sales office have the knowledge to answer customers' questions.	1	2	3	4	5
4	The hospital gives customers individual attention.	1	2	3	4	5
	Empathy					
1	Their operating hours are convenient to all their customers.	1	2	3	4	5
2	Employees give customers personal service.	1	2	3	4	5
3	Employees have their customers' best interest at heart.	1	2	3	4	5
4	The employees understand the specific need of their customer.	1	2	3	4	5

Appendix B. The state of perception and expectation of respondents

Table 8- The state of perception and expectation of respondents of client satisfaction survey in Gambela hospital, June-July 2016

Service Quality Dimensions	Expectations					Perceptions				
	Strongly disagreed	Disagreed	Neutral	Agree	Strongly agree	Strongly disagree	Disagreed	Neutral	Agree	Strongly agree
Tangibility										
Hospital has modern equipment	5	62	42	213	111	25	91	91	218	7
Equipment and supplies associated with the services are visually appealing at the hospital	2	60	52	307	12	47	141	90	153	1
Hospital staff appear neat	0	10	9	321	93	4	25	12	317	74
Physical environment of the hospital is clean	1	51	72	302	7	66	221	50	93	2
Total	8	183	175	1143	223	142	478	243	781	84
Reliability										
When the hospital promises to do something by a certain time, they do so	1	42	28	355	7	34	126	20	248	4
When a customer has a problem, hospital staff show a sincere interest in solving it	1	46	33	399	3	38	130	29	234	0
Hospital performs the service right the first time	0	19	24	392	28	27	95	37	269	3
Hospital staff provides services at the time they promise to do so	2	36	15	368	12	33	113	25	260	1
Hospital insists on error-free records.	4	55	94	271	7	56	152	32	185	4
Total	8	198	194	1785	57	188	616	143	1196	12
Responsiveness										

Hospital staff tell me exactly when the service will be performed	5	57	55	305	11	20	115	57	236	4
Hospital staff give prompt service to clients	4	39	81	293	16	56	178	31	164	3
Hospital staff are always willing to help clients	1	28	29	348	25	14	87	63	258	10
Hospital staff are never too busy to respond to my request	3	33	45	319	33	37	87	47	249	11
Total	13	157	210	1265	85	127	467	198	907	28
Assurance										
Behavior of hospital staff instills confidence in me	0	28	41	355	9	28	101	45	250	5
I feel safe in their service with front line hospital staff	1	28	55	343	5	29	97	42	253	7
Front line hospital staff are polite	0	21	43	355	12	2	69	49	282	28
Hospital staff have the knowledge to answer my questions	0	15	24	347	47	24	112	30	256	7
Total Score	1	92	163	1400	73	83	379	166	1041	47
Empathy										
Hospital staff give me individual attention	3	29	17	326	58	28	154	34	179	35
The hospital has operating hours that are convenient to all the clients	2	31	23	364	13	13	88	49	275	4
The hospital has employees who give me personal attention	1	49	60	317	6	25	123	31	249	2
Employee of the hospital has my best interest at heart	2	36	38	352	1	23	98	70	237	2
The hospital staff understand my specific needs	2	34	24	360	1	14	120	42	252	2
Total score	10	179	162	1719	79	103	583	226	1192	45

Appendix C. Cronbach's Alpha Analysis

Table 9: Cronbach's alpha for each average items of expectation, perception and all statements

Items	**Cronbach's Alpha (α)**
For the 22 SERVQUAL statements	**0.875**
Tangibility E	0.728
Reliability E	0.630
Responsiveness E	0.388
Assurance E	0.265
Empathy E	0.563
Tangibility P	0.645
Reliability P	0.774
Responsiveness P	0.564
Assurance P	0.443
Empathy P	0.801

Declaration

I, Awoke Tasew Tebeje, hereby submit my MBA Thesis for oral defense, entitled '**Assessment of Service Quality of Outpatients in Gambela Hospital, Gambela Regional State, Ethiopia''** and truthfully declare that the above thesis is a product of my original research investigation. I further confirm that it has not been submitted either in part or in full for any Degree.

Signed on this day of 30 June 2016

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Awoke Tasew (Dr)