CLIENT PERCEPTION ON QUALITY OF HEALTH CARE OFFERED TO IN-PATIENTS IN PUBLIC AND FAITH BASED HOSPITALS IN KIAMBU AND NAIROBI COUNTIES, IN KENYA: A COMPARATIVE STUDY.

BY

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A THESIS SUBMITTED IN PARTIAL FULFILMENT OF THE REQUIREMENTS FOR THE DEGREE OF DOCTOR OF PHILOSOPHY IN PUBLIC HEALTH

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DECLARATION

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I,……do hereby declare that this thesis is my original work and has not been submitted for the award of a degree or diploma in any other University or college.

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ACKNOWLEDGEMENTS

This thesis is an important milestone in my academic journey and l would like to make a special mention of the individuals and institutions that have made this journey possible. My gratitude goes to Maseno University for granting me the opportunity to undertake a PhD degree. I also acknowledge, with gratitude the financial and moral support I received from the Sisters of St. Joseph of Mombasa. My special thanks to my supervisors Prof. Rosebella Onyango and Prof. James H. Ombaka for time, intellectual discussions, critical questioning and guidance throughout the study. I greatly recognize and appreciate their humility, insight and wealth of knowledge that enabled me to gather from their critiques.

I wish to convey my sincere gratitude to Medical Superintendent of Kiambu, Mbagathi District hospitals, and the Hospital Administrators of Nazareth and Jamaa Mission hospitals and their teams for the permission to undertake the study in the institutions. I further acknowledge the contribution and enhanced knowledge received from friends during informal consultations especially Rev. Dr. H. Mativo. Last but not least, I thank all my respondents for sparing time to respond to my questionnaires.

God bless you all.

DEDICATION

This work is dedicated to my creator, the Almighty God for granting me the opportunity to acquire Knowledge which would enable me to serve His people with humility and simplicity, and my loved ones especially my Dad, Mum, and all my family members, not forgetting my loved congregation of Sisters of St Joseph of Mombasa, my two supervisors and my friend Rev. Dr. H. Mativo.

ABSTRACT

Quality is the ability to deliver services that satisfy the consumer's needs whereas service quality is the ability to meet or exceed customer expectations, providing quality healthcare is an ethical obligation of all healthcare providers and receiving quality care is a right of all patients. Kenya has witnessed general deterioration in health indicators due to rapid population growth, child nutrition problems, poverty, HIV/AIDS, acute respiratory infections, malaria, diarrhea, and poor quality health facilities and services. Nairobi city with high population and Kiambu a neighboring County, the Public and some Faith-based hospitals in these two counties experience shortage of drugs and medical supplies, unaffordable out-of-pocket costs for health services' consumers, poor quality of care due to overcrowding of the patients, thusservices provided are considered unsatisfactory. Public and Faith-based hospitals are preferred since they handle patients from all classes and with various health problems. The purpose of this study was to compare client perception on quality of health care offered to patients admitted into Public and Faith-based Hospitals in Kiambu and Nairobi counties, Kenya. The specific objectives were to identify the service quality dimensions that contribute to patient's satisfaction in Public and Faith-based hospitals; to compare the perception of patients on public with faith-based hospitals service quality and assess compliance of public hospitals with faith-based hospitals service to Ministry of Health quality standards. Few studies have reputed comparative analysis of quality of health care in faith based hospitals with public hospitals by use of SERVQUAL dimensions to asses' patient perception. The study was carried out at Mbagathi District hospital and Jamaa Mission hospital in Nairobi County and Kiambu County hospital and Nazareth Mission hospital in Kiambu County. A sample size of 384 of hospitalized patients was calculated using Fishers formula. To select a sample of 384 patients, a sample frame was made for each hospital. Systematic sampling, every 5^{th} patient at exit point was used to select the clients to be interviewed. Qualitative data was collected using open ended questions and quantitative data was obtained by use of structured questions and assessment checklists. Qualitative data was analysed using Atlas.ti 7.0 results was exported to Microsoft Word and was used to identify dimensions for patient satisfaction while Quantitative data was used to assess patient perception on service quality. T test was used to test the difference in means between public and faith-based hospitals service quality at $p \leq 0.05$ test of significance.
Chi-Square was used to test significance difference on patient perception on service quality dimensions in faith-based and public hospitals. Qualitative results on dimensions infaith-based hospitals had many satisfies as compared to public hospitals these were cleanliness of the environment, availability of equipment, maintenance of physical structure, adequate meal, availability of drugs and services, caring, courtesy, efficiency, doctors attitude and low mortality and morbidity rate while in public hospitals were cost of services, adequate meal, doctors attitude and interpersonal skills. Quantitative results showed that faith-based hospitals overall mean was (4.23 on a scale of 1 to 5 & SD 0.347) showing positive opinions and public hospitals mean was 2.62 (on a scale of 1 to 5 & SD 0.760) indicating negative opinions among all five (Tangibility, Responsiveness, Reliability, Assurance and Empathy) dimensions. The overall T test was -24.688; there was a mean difference in the patient's opinions of public and faith-based hospitals on perception of service quality. There was significance difference at $p \leq 0.05$; T test and Chi-Square p value was .000 for all five dimensions. The results confirmed that faith-based hospitals (94%) compliance was higher than public hospitals (68%) to Ministry of Health Quality Standards. Patients had positive perception on service quality in faith-based and negative perception on service quality in public hospitals. There is need for re-structuring health service in public hospitals, to put in empowerment strategies to provide patient centeredness which is continuous quality health care improvement process.

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LIST OF ABBREVIATIONS

AHRQ Agency for Health Care Research and Quality

AIDS Acquired Immune Deficiency Syndrome

ART Anti- Retroviral Therapy

ARV Anti- Retroviral Drug

C.O Clinical Officer

CCTV Closed Circuit Television

CDF Constituency Development Fund

CHAK Christian Health Association of Kenya

CQI Continuous quality Improvement

CSO Civil Society Organization

DF Degree of Freedom

DHIS Department of Health Information Systems

DHMB District Health Management Board

DHMT District Health Management Team

DSRS Department of Standard and Regulatory Services

EFQM European Foundation for Quality Management Model

FBO Faith Based Organization

FIF Facility Improvement Fund

GDP Gross Domestic Product

GOK Government of Kenya

HFC Health Facility Committee

HIV Human Immunodeficiency Virus

HMIS Health Management Information System

HR Human Resource

IHSDN Integrated Health Service Delivery Network

IOM Institute of Medicine

KEC Kenya Episcopal Conference

KEMSA Kenya Medical Supply Agency

KIPPA Kenya Institute for Public Policy Research Analysis.

KNBS Kenya National Bureau of Statistics

KNH Kenyatta National Hospital

KQM Kenya Quality Model

MCH Maternal and Child Health

MOH Ministry of Health

MOMS Ministry of Medical Services

MOPHS Ministry of Public Health and Sanitation

MOU Memorandum of Understanding

NCST National Council for Science and Technology

NGO Nongovernmental organization

NHSSP National Health Sector Strategic Plan

OPD Out Patient Department

PFP Private - for- profit

PG Post Graduate

PHD Doctor of Philosophy

PHO Public Health Officer

PMTCT Preventive Mother to Child Transmission

PNFP Private- not -for - profit

RMP Registered Medical Practitioners

ROK Republic of Kenya

SA	Strongly Agree
SD	Standard Deviation
SI	Sampling Interval
SPSS	Statistical Package of Social Science
SSA	Sub-Sahara Africa
SUPKEM	Supreme Council of Kenya Muslims
TQM	Total Quality Model
TB	Tuberculosis
USAID	United States Agency for International Development
VCT	Voluntary Counseling and Testing
WHO	World Health Organization
WWW	World Wide Web

OPERATIONAL DEFINITIONS

Assurance	Knowledge and courtesy of employees and their ability.
Effectiveness	The outcome of an intervention or service measured in natural unit.
Efficiency	Degree of promptness of the care given to patient
Empathy	Caring, individualized attention the firm provides for its customers.
Equitable	Providing care that does not vary in quality because of personal characteristics, such as gender, ethnicity, geographic location, and socioeconomic status.
Evaluation	The use of scientific method, and the rigorous and systematic collection of research data to assess the effectiveness of organization services and programmes (for example health service interventions) in achieving predefined objective.
Facility Level	This is the Level of the facility as defined in the Kenya Essential Package for Health (KEPH). This shows the actual level of service provision at which a facility is operating – regardless of the official facility type.
Faith Based Hospitals	Are faith inspired hospitals and are managed by specific churches to provide health care services to citizen.
Level of Quality	The degree of compliance of an actual activity or resource to corresponding standard.
Observation	Technique that involves systematically selecting, watching and recording behavior and physical characteristic of living being, object or phenomena.

Outcomes	Refer to projected results of a patient's health status or change in health status (e.g., an improvement in symptoms or mobility) resulting from the medical care received. This includes intended outcomes, such as the relief of pain, recovery and unintended outcomes, such as complications or death
Patient Centered	Providing care that is respectful of and responsive to individual Patient preferences, needs, and values and ensuring that patient values guide all clinical decisions
Patient Satisfaction	State of pleasure or contentment with an action, event or services providing desired needs.
Perception	The consumers 'evaluation of the service and service providers.
Process Measures	Assess whether a patient received what is known to be good care. They can refer to anything that is done as part of the encounter between a physician and another health care professional and a patient, including interpersonal processes, such as providing information and emotional support, as well as involving patients in decisions in a way that is consistent with their preferences, etc.
Policy	The statement of understanding aimed at guiding or channeling the implementation of quality services at public and private health facilities.
Public Hospitals	Are government owned hospitals and are managed by the government to provide health care services to citizen.
Quality	The ability to deliver services that satisfies the consumer's needs.

Quality Cares	The degree of satisfying in overall care.
Quality Healthcare	Proper performance of interventions that are known to be safe effectiveness, and have the capacity to produce a positive impact on morbidity, mortality, disability and malnutrition.
Quality Improvement	Means any process or tool aimed at reducing the quality gap in systemic and organizational functions according to the dimensions of quality.
Reliability	Ability to perform the promised service dependably an accurately.
Responsiveness	Willingness to help customers and provide prompt service.
Rural	Encompasses all population, housing and territory not included within an urban area.
Safe	Avoiding injuries, harm, threat, danger or risk to patients from the care that is supposed to help them.
Service Quality	The extent to which a service meets customers' needs or expectations.
Standards	Description of how an activity should be performed.
Tangibility	Physical facilities, equipment, and appearance of personnel.
Timely	Reducing waits and sometimes harmful delays for both those who receive and those who give care.

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CHAPTER ONE

INTRODUCTION

1.1 Background Information

Quality is the ability to deliver services that satisfy the consumer's needs, providing quality healthcare is an ethical obligation of all healthcare providers (Zineldin, 2006) and receiving quality care is a right of all patients Pickering (1991). Service quality was defined by Pui-Mun *et al.* (2006) as the ability to meet or exceed customer expectations. In the National Health Sector Strategic Plan of 2005- 2010 (Kenya) the goal was to reduce inequalities in health care and provide quality health care for the citizen by 2010 which has not been achieved (MOH, 2005).

Kenya's health gains of the 1980s and 90s have begun to reverse. According to the World Health Organization (WHO), the country recently witnessed a general deterioration in health indicators due to rapid population growth, child nutrition problems, poverty, HIV/AIDS, acute respiratory infections, malaria, diarrhea, poor quality health facilities and services (WHO, 2008).

Delivering service quality has significant relationship with customer satisfaction as indicated by Wilson *et al.* (2008), customer retention and loyalty (Boshoff, & Gray, 2004), costs and profitability (Irving and Dickson, 2004), service guarantees (Kandampully and Butler, 2001) and growth of organization. However, the poor state of customer service in some public hospitals and faith-based in Kenya has resulted in high turnover and weak morale among staff, problems with patients care, increased cost of operations due to inefficiencies leading some patients to look for an alternative provider and to spread negative word of mouth which affects potential clients hence growth of the hospitals as indicated by Tam (2005); Owino and Korir (2000). This

situation is further worsened by the patients or customers perception of functional issues which they perceive and interact with during the course of seeking treatment such as physical facilities, internal process; interactions with doctors, nurses and other support staff as poor and unresponsive Algılanan and Connor (2003). In their studies, Demirel *et al.* (2009) found a positive and significant relationship between customers‟ perception of service quality and their willingness to recommend the hospital. Whereas there has been an attempt to improve the situation, it seems not much has been achieved in raising the quality of service in public health institutions and this is compounded by limited information on the delivery of service quality in the public and faith based health sector in Kenya. Local studies done on service quality had focused on banking and public sector in general. For instance Gachie (2008) investigated an evaluation of Service Quality focusing on Kenyan Commercial Banks, Kimando and Njogu (2012) carried out a survey on factors that affect quality of customer service quality in the Banking Industry in Kenya: A Case Study of Post bank head office Nairobi while Wambugu (2012) undertook a study on service quality practices among Commercial Banks in Kenya. There is no known study that had focused on perception of patients on service quality in public and faith-based hospitals. This study therefore sought to compare client perception on quality of health care service offered to in-patients in public and Faith-based hospitals in Kenya with specific reference to Kiambu and Nairobi counties.

It is widely believed that Public sector hospitals are generally considered poor service providers, mismanaged, and politicized units. There is a lack of public trust and confidence in government hospitals in terms of quality services provided at their end due to insufficient infrastructure facilities, lack of responsiveness, low reliability, and absence of empathy, obsolescent equipments, and minimal medicines availability

(Zahida, 2012). This leads to overcrowding, and in a result usually moving to a sharp decline in the quality of services. They lack in basic facilities, supplies of medicines, staff, doctors, infrastructure, modern technology, low funds to run operations of the units properly (Zahida, 2012).

Nairobi being metropolitan centre provided the opportunity for the study and Kiambu being reasonable rural provider centre may be influenced by Nairobi that is why Kiambu and Nairobi were preferred for the study. Nairobi as a city with high population and Kiambu a neighboring counts, the hospitals experience Shortage of drugs and medical supplies, unaffordable out-of-pocket costs for health services' consumers, poor quality of care due to overcrowding of the patients (World Bank, 2006). Public and Faith-based hospitals were chosen as these two types of hospitals are reputed to handle patients from all classes and with various health problems.

Faith-based hospitals have the potential to ease the increasing burden on public health resources brought about by scaling-up of re-emerging and emerging diseases. However, quality concerns have limited its role. Faith-based is faith inspired hospitals and are managed by specific churches to provide health care services to citizen. Faith-based institutions are organization based on a particular religious ideology, has religiously oriented mission statements and often draws its activists (Wilkinson, 1989). Therefore catholic hospitals are within the category of faith-based institutions where the study was carried out.

Public health care is usually provided by the government through national healthcare systems. Despite this, the health sector in Kenya is marred with various problems such as underfunding, poor quality care and poorly staffed health facilities, which lead to overcrowding, and limited service provision. In addition, there is a huge disparity

in the delivery of health services between rural and urban areas as indicated in the Devolution of Healthcare Services in Kenya, a 2013 report. The report says that approximately 78 % of Kenyans live in rural areas; a disproportionate share of healthcare facilities is located in urban areas.

In many African countries, consumers walk miles past nearly free government health centers to get to faith based hospitals that charge many times as much (World Bank, 1986). In Africa it is typically believed that faith-based institutions are preferred by users. Of course, it is widely recognized often have structural and quality concerns of their own. However, as in the 1986 World Bank report, there remains a perception that health- seekers often 'prefer' faith-based – sometimes because faith-based are located in rural and hardship areas in which there are no other services (World Bank, 1986). This led to current study comparing public and faith based hospitals in both rural and urban centre to examine the perception that patient choose faith-based because they are available in rural areas.

Poor quality of care is one of the most common reasons why clients would not choose to use available health services. For example, Iyaniwura and Yussuf (2009) found that perceived quality of service was the most important factor which influenced the choice of a facility to receive care. Similarly, a perceived lack of quality of care was associated with a late visit to a health care provider in Kenya (VanEjik *et al*., 2006). Concern over the quality of health care services in Kenya has led to loss of faith in public and private hospitals, low utilization of public health facilities, and increasing outflow of patients to faith-based hospitals. Under the circumstances, assessment of the country's quality of health care service has become imperative, in which the patient's voice must begin to play a greater role (WHO, 2007). Consequently, it is

evident that this study was carried out to compare the perception of patients on quality of health care in public and faith- based hospitals in Kiambu and Nairobi Counties, Kenya.

Studies on patients' satisfaction have become a veritable tool in assessing the quality of health care services. This is so for a number of reasons; first, patients' satisfaction survey provides an avenue where users of health care services are able to express their perceptions on all aspects of service provision. Second, the information obtained thereof is crucial to service providers and policy makers in addressing identified gaps. Third, addressing such gaps promotes sustenance of service delivery and thereby helps service providers to remain focused in meeting objectives as reputed by Osungbade and Kayode (2013). This study identified the dimensions that contribute to patient's satisfaction in public and faith-based hospitals.

The dimensions of quality that relate to client satisfaction affect the health and well-being of the community. Patient satisfaction is one of the factors that influence whether a person seeks medical advice, complies with treatments and maintains a relationship with the provider/health facility (Brawley, 2000).

Health quality experts have defined quality in various ways for example Donabedian (1990) defined quality care as "that kind of care which is expected to maximize an inclusive measure of patient welfare, after one has taken account of the balance of expected gains and losses that attend the process of care in all its parts." According to Donabedian, quality is both technical and interpersonal. He further stated that quality involves more than just outcomes and proposed three distinct factors: structure, process and outcomes. Structure refers to the facility such as a hospital or clinic, its safety, cleanliness, and availability of equipment. Process refers to the medical staff's

use of the structure. Outcomes refer to the patient getting well or at least getting no sicker than without intervention. He also gives seven attributes of health care that define quality as efficacy; effectiveness, efficiency, optimality, acceptability, legitimacy and equity.

In recent decades, carrying out an evaluation on quality health care has been found to be the most useful approach for getting patients' views on how to provide cares (Sajid, 2007). This is based on two major principles: patients are the best source of information on quality of health services provided and patients' views are the determining factors in planning and evaluating quality of health care. Inappropriate provider's behaviour, insufficient case management capacity, referral and communication failures were identified at the service delivery level as some of the weaknesses leading to poor quality health care (Sajid, 2007). Others included insufficient coordination between actors, weak links between programmes, and inappropriate use of information (Sadiq, 2003). It is therefore, critical to identify service quality dimensions that contribute to patient's satisfaction in Kenya.

Service quality is generally measured by applying different models like TQM (Total Quality Model) EFQMM (European Foundation for Quality Management models. In this study SERVQUAL model is taken under consideration developed by Parasuraman *et al.* (1985, 1988), this model has its application in approximately all service industries like banks, hotel, airlines, tourism, health, education etc. By using the model we may evaluate customers "satisfaction with services provided units through five independent variables namely reliability, responsiveness, assurance, empathy and tangibles in connection with perceived performance and expectation disconfirmation and finally effects are tested with customers" satisfaction.

The SERVQUAL instrument has been refined and developed into a multiple-item scale for assessing consumer perceptions of service quality (Parasurarman *et al*. 1980; Parasuraman *et al.,* 1991). The items in SERVQUAL are grouped into five distinct dimensions including: Reliability: Ability to perform the promised service dependably and accurately, Responsiveness: Willingness to help customers and provide prompt service; Assurance: Knowledge and courtesy of employees and their ability; Empathy: Caring, individualized attention the firm provides for its customers; and Tangibility: Physical facilities, equipment, and appearance of personnel. The SERVQUAL approach is the most common method for measuring service quality. Commonly used to define service quality as the extent to which a service meets customers' needs or expectations (Wisniewski and Donnelly, 1996). In an investigation conducted by Brysland and Curry, (2001) in a catering company; The SERVQUAL instruments to assess the perception of consumer in catering company and therefore current study used SERVQUAL instruments to asses' patient perception of health care service accorded to in-patient in public and faith based hospital. The application of SERVQUAL technique in evaluating service quality in hospitals has not been done in Kenya. Recent systematic reviews have highlighted quality failings in both public and private care settings in developing countries (Berendes *et al*., 2011) and have added power to earlier calls to standardize and assure the quality offered by private providers (Patouillard *et al.*, 2007). According to the WHO (2000) Sub-Saharan Africa is ranked among the lower 50% in terms of health systems performance. This challenge demands well developed performance health systems to efficiently and effectively address the problem WHO (2000). The current study therefore uses SERVQUAL instruments to assess the perception of patients on service quality in public and faith-based hospitals in Kenya.

It is not however clear to what extent faith- based and public hospitals within the study areas comply to Ministry of Health's set standards of health care that satisfy the client's needs as prescribed by MOH's department of Standard and Regulatory Services (MOH, 2002). The main goal of the National Health Sector Strategic Plan of 2005- 2010 was to reduce inequalities in health care and reverse the downward trends in health outcomes; however, it is not clear whether this has been achieved. It is not currently clear whether there is a quality health care service in Kenya, nor is it known to what extent the quality and responsiveness of service in the sector have improved. It is therefore important to assess the compliance by public and faith-based hospitals to Ministry of health quality standards.

A survey was done in Uganda by ministry of health in 2007 and found that lack of equipment and qualified staff at health facilities affected the capacity to diagnose and treat patients appropriately. Many health facilities were reported to lack functioning health equipment for theatre and other general operations, as well as qualified staff. This was reported to lead to situations where the community seeks care from facilities that have the above facilities. If the illness is minor they reported that they may go to a PFP (Private for Profit) facility. If the illness is severe then they may go to a hospital which may be PNFP (Private- not- for-profit), private or even public (Uganda Ministry of Health, 2007). Poor hygiene was noted to be a big problem at both public and private facilities. This was an area that they felt needed emphatic effort by everyone. They suggested the use of posters and inspection of health facilities to improve hygiene at health facilities was necessary. Bye laws and regulations could also be enforced to encourage the health facilities to maintain the set standards, (Uganda Ministry of Health, 2007).

1.2 Problem Statement

Sub-Saharan Africa is ranked among the lower 50% in terms of service quality performance of health systems. Report indicates that, Kenya's health gains of the 1980s and 90s have begun to reverse. The country recently witnessed a general deterioration in health indicators due to rapid population growth, child nutrition problems, poverty, HIV/AIDS, acute respiratory infections, malaria, diarrhea, and poor quality health facilities and services.

Delivering service quality has significant relationship with customer satisfaction, customer retention, loyalty, costs, profitability, service guarantees and growth of organization. However, the poor state of customer service in public hospitals and some faith-based hospitals in Kenya has resulted in high turnover and weak morale among staff, problems with patients care, increased cost of operations due to inefficiencies leading to some patients to look for an alternative provider and to spread negative word of mouth which affects potential clients hence poor growth of the public and faith-based hospitals.

Kiambu County neighbours Nairobi is a city which has a high population and as a results Kiambu County experience population influx and pressure on available limited health services. The health system experience shortage of drugs and medical supplies, unaffordable out-of-pocket costs for health services' consumers, child nutrition problems, poverty, HIV/AIDS, acute respiratory infections, malaria, diarrhea, poor quality of care due to overcrowding of the patients. These pressures characterize the challenges in quality service delivery. Faith based hospitals has the potential to ease the increasing burden on public health resources. The health sector in Kenya is marred with various problems such as underfunding, poor quality care and poorly staffed

health facilities, which lead to overcrowding, and limited service provision that compromises the quality of services. This has been highlighted by Ministry of Health that health services quality standards are not actively implemented by health facilities both public and faith-based hospitals. With clear focus that patients are the key consumers of these services at the hospitals, the report by the Ministry of Health and the challenges highlighted earlier in this section, prompts dare need to assess the patient's perceptions on quality of health care services accorded to in-patients in public and faith-based hospitals to assist in evidence improvement of the services.

1.3 Justification

Both sides of the public versus faith-based healthcare debate draw on selected case reports to defend their viewpoints, but there is a widely held view that the faith-based health system is more efficient than the public health system. Therefore, there is an urgent need to compare the perception of clients on health care service quality provided through both systems.

Nairobi being metropolitan centre provided the opportunity for the study and Kiambu being reasonable rural provider centre may be influenced by Nairobi that is why Kiambu and Nairobi were preferred for the study. Public and Faith-based hospitals were chosen as these two types of hospitals are expected to handle patients from all classes and with various health problems (World Bank, 2006). Nairobi as a city with high population and Kiambu a neighboring county the hospitals experience shortage of drugs and medical supplies, unaffordable out-of-pocket costs for health services' consumers, poor quality of care due to overcrowding of the patients (World Bank, 2006).

The research on health service quality in Kenyan is still scanty. Hence, this research contributes to a growing body of research into implementation within service organization by presenting Kenyan perspective in the health care industry. The four hospitals were chosen based on patient's population (31%) of patients admitted in two public and two faith-based hospitals in the study area in Nairobi and Kiambu Counties. The application of SERVQUAL technique in assessing perception of patients on service quality in hospitals is still limited locally.

The Ministry of Health in an attempt to provide quality health care incorporated several aspects of quality in the health sector reform as a policy using the facility improvement fund in 1995. A department of Standards and regulatory services was subsequently established in the year 2000 at the Ministry of health headquarters to regulate the standards of services offered in health care institutions. It is appropriate to assess the compliance of hospitals to Ministry of Health quality standards MOH (1994).

1.4 Objectives

1.4.1 General Objective

To compare client perceptions on quality of health care offered to patients admitted into public and Faith-based hospitals in Nairobi and Kiambu Counties in Kenya.

1.4.2 Specific Objectives

1. To identify the service quality dimensions that contributes to patient's satisfaction in Public and Faith-based hospitals in Kiambu and Nairobi, Kenya.
2. To compare the perception of patients on service quality in public and faith-based hospitals in Kiambu and Nairobi, Kenya.

3. To assess compliance to Ministry of Health quality standards by public and faith-based hospitals in Kiambu and Nairobi Kenya

1.4.3 Research Questions

1. What are the service quality dimensions that contribute to patient's satisfaction in Public and Faith-based hospitals in Kiambu and Nairobi, Kenya?
2. What is the perception of patients on service quality in public and faith-based hospitals in Kiambu and Nairobi, Kenya?
3. What is the compliance to Ministry of Health quality standards by public and faith-based hospitals in Kiambu and Nairobi Kenya?

1.4.4 Hypothesis

1. There is no client perceived difference in service quality in public and faith-based hospitals.

1.5 Significance of the Study

The findings of this study would be relevant and valuable to stakeholders in health care sector including health system developers, policy makers and more importantly to hospital management team to understand areas of improvement. Hospital top management can apply research findings to design and prioritize hospital strategies for improving service quality. This research results would further help healthcare providers to understand customer's preferences by identifying the service quality dimensions that contribute to patients satisfaction. The hospitals could use the instrument (questionnaires) of this study to collect data about their patients' perceptions in order to make strategic decisions. Finally, the study findings would direct intervention efforts to improve health care provision for better treatment outcome for patients.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

Quality" as defined by International Organization for Standardization in 2004 is a relative concept, and if the inherent characteristic of a service meets the requirements of the customer, it can be rated as high quality (Reinartz, 2004). Quality health care service should be Safe – avoiding injuries to patients from the care that is supposed to help them. Effective – providing services based on scientific knowledge to all who could benefit and refraining from providing services to those not likely to benefit (avoiding underuse and overuse); Patient-centered – providing care that is respectful of and responsive to individual patient preferences, needs, and values and ensuring that patient values guide all clinical decision; Timely – reducing waits and sometimes harmful delays for both those who receive and those who give care; Efficient – avoiding waste, in particular waste of equipment, supplies, ideas, and energy; and Equitable – providing care that does not vary in quality because of personal characteristics, such as gender, ethnicity, geographic location, and socioeconomic status (Institute of Medicine, 2001).

Quality healthcare is proper performance of interventions that are known to be safe effective, and have the capacity to produce a positive impact on morbidity, mortality, disability and malnutrition (WHO, 2006). Service quality was defined by Pui-Mun *et al.* (2006) as the ability of service to meet or exceed customer expectations. In general, providing quality healthcare is an ethical obligation of all healthcare providers as indicated by Zineldin (2006) and receiving good quality care is a right of all patients (Pickering,1991). Evaluation of service quality becomes increasingly important for assessing quality in today's business, particularly in health care industries.

2.1.1 Service Quality Dimensions and Patient Satisfaction

Hollis (2006) argued that there was a strong link between service quality and satisfaction, to the extent that it is believed that quality has been defined in other consumer-orientated industries as perceived satisfaction. Though, Tam (2007) argued that satisfaction arises from a process of comparing perceptions of service with expectations. The initial expectations that patients have about care and services act as a major determinant of satisfaction. Elements of measuring health system focus on structures, processes, and outcomes of care. Often the concerns of the consumers such as satisfaction are however not included (Rundall *et al.,* 2002). Furthermore, Donabedian (1982) identified three approaches for defining the quality of health care as structure, process, and outcome, which include aspects of technical and client quality care. The SERVQUAL (Parasuraman *et al*., 1985; Lewis and Booms, 1983) approach is the common method used for measuring service quality and defining service quality as the extent to which a service meets customers' needs or expectations (Wisniewski and Donnelly, 1996). Service quality can thus be defined as the difference between customer expectations of service and perceived service. There is however no single universal definition for the service quality in the literature as indicated by Zineldin (2006); nevertheless, many researchers have defined the service quality from their own point of view. Few studies in Kenya have attempted to measure service quality. Local studies done on service quality had focused on banking and the current study focused on service quality in hospitals. For instance, Gachie (2008) investigated an evaluation of Service Quality focusing on Kenyan Commercial Banks, Kimando and Njogu (2012) carried out a survey on factors that affect quality of customer service quality in the Banking Industry in Kenya: A Case Study of Post bank head office Nairobi while Wambugu (2012) undertook a study on

service quality practices among Commercial Banks in Kenya. There is no known comparative study that had focused on assessing patients' perception on service quality in public and faith based hospitals.

Patient satisfaction and service quality are critical components in strategic planning processes; because as a result of increasing in better technology, patients are more informed than ever and if they are not satisfied, they will switch to an alternative health care provider (Ramsaran-Fowdar, 2008).The researchers have different opinions on dimensions of quality of healthcare services that has not been researched in Kenya. The existing opinions on dimensions of service quality have been done in other countries. For instance Muhammed and Mohamed (2015) conducted a study on Patients' Satisfaction with Public Health Care Services in Bangladesh. Another study was conducted by Muhandwa *et al.* (2008) on Patient Satisfaction at the Muhimbili National Hospital (Public hospital) in Dar es salaam, Tanzania. The mentioned studies have been carried out in public hospitals as indicated above there is no known study reputed comparative analysis of quality of healthcare in FBO hospitals with public hospitals in Kenya.

Patient satisfaction is defined as the extent to which a patient's expectations or desire, and their perceptions are met Shelton (2006). Few studies have been conducted on patients satisfaction in Kenya for instance a Case of Kenyatta National Hospital by Wanjau *et al.*(2012) on Factors Affecting Provision of Service Quality in the Public Health Sector. A study conducted by Nyongesa *et al.* (2014) on patient satisfaction with health care at Pumwani Maternity Hospital in Nairobi, found that availability of health care providers, cleanliness of the facility, availability of health care service, drugs and equipment are some of the factors influencing patient satisfaction. There

was no study in Kenya that reputed comparative analysis on patient satisfaction variable in faith-based and public hospitals.

2.1.2 Facility Infrastructure and Patient Satisfaction

As the population grows, new buildings, vehicles and equipment will be needed. If funds for the infrastructure and equipment are allocated inefficiently, or poorly used, the delivery of health services will be severely impaired in both public and faith-based facility. In 1990 – 1991 survey of fifty hospitals operated by the Kenya Ministry of Health, found that 40% of the public facility buildings were in poor unsatisfactory condition (MOH, 1997) than faith- based facility. The use of vehicles in the public health sector has been greatly restricted by chronic shortage of fuel and lack of maintenance and repairs (MOH, 1997). This supports Qayum *et al*. (2010) who highlighted the three problems, which dominate Africa's health infrastructure and equipment, as: insufficient maintenance, inappropriate and insufficient expansion, and poor planning especially in public sector. A study conducted by Mliga (2003) in Tanzania found that church facilities performed better than public with regard to technical measures and medicine stocks, patients were much satisfied with faith-based health services. Though clients valued the service provided by public facilities relative to the cost of those services (Mliga, 2003) clients experienced a lot of difficulties in getting medicines at public hospitals as shown by Levin *et al.* (1999) who made a similar observation – when finding that the two mission health facilities in Uganda had more drugs available and perform more lab tests than the public health facilities.

A study conducted in Nigeria on health equipment, revealed that close to one third of the equipment in series of public health care institutions were not being used (Adeyi and Marrow, 2006) as compared to faith inspired institutions where the equipment

were well maintained. Another study was conducted in Bangladesh by Ashrafun and Uddin (2011) to identify factors determining in-patient satisfaction in public and faith-based hospitals the results reported that toilets, bathrooms, wards and linen condition, quality of food, were most influential factors contributing to patient dissatisfaction in public hospitals in Bangladesh. Ashrafun and Uddin findings agree with Boshoff and Gray, (2004) who indicated that customer satisfaction dimensions includes satisfaction with meals, satisfaction with the nursing staff and satisfaction with cost and cleanliness of the facility may also have some impact on loyalty and cumulative satisfaction, (Boshoff and Gray, 2004). This also applies to Szyca *et al.* (2012) results which indicated that the factors pertaining to costs and personnel competence had very significant influence on patient satisfaction (Szyca *et al.*, 2012).

Another study conducted by Muhammed and Mohamed (2015) found that Patients' Satisfaction with Public Health Care Services in Bangladesh and found that the situation of dissatisfaction arises due to many factors which include access to health care, delivery of free medicine, the cost of medicine, behavior pattern of service providers such as rude behavior, lack of proper attention about hearing their condition, less caring attitude to the patient leading to dissatisfaction. The above studies have all been carried out in public hospitals only a few studies have reported comparative data on service quality dimensions in FBO hospitals and public hospitals. For example in America by Prattana *et al*. (2012)assessed patients' expectation and satisfaction in public and faith-based facility pertaining to hospital service quality showed that the largest positive gap between patients' perception and expectation in public facility was tangibility. Prattana *et al*. (2012) also found that reliability and tangibility are two most important dimensions of hospital service quality perceived by patients. Uzochukwua (2005) suggested that governments need to focus not only on

the provision of drugs and revenue generation but also on providing strong support for in-service training, monitoring and supervisory activities to improve health workers' skills for better results (Uzochukwua, 2005) like in faith-based. A study carried out in Mozambique on patients satisfaction found that most frequently faced problems affecting utilization on the day of visit leading to dissatisfactions in public hospitals were: failure to obtain prescribed medications (Newman *et al.,* 1998).

Another study done by Mwabu *et al.* (2004) found that quality relates to the quantity and quality of physical resources such as buildings and equipment, skills of health personnel, and availability of physicians and specialists. The availability of drugs and supplies and the cost of medication are also important attribute of the quality of services in both public and faith inspired facility. Also Kaye conducted a study in Uganda and found that understaffing leads to overworking that reduces staff morale and lowers performance and quality of care (Kaye, 2000).

2.1.3 Health Care Process and Patient Satisfaction

The concept of patient satisfaction is rapidly changing to customers' delight which means the patient is not only cured of his ailment during the hospital stay but also satisfied with other needs for example word of mouth (Akoijam *et al*., 2007). Patients' satisfaction with care is one of the pillars of patient-centered care (Aleksandra *et al*., 2012).Courtesy is an increasingly important concern. Bratton's (2006) respondents ranked lack of respect just as highly as long waiting times, high fees or shortage of medicines as reasons for not choosing public facility and preferring to faith-based. In another study on the TB services in Uganda by Babikako *et al.* (2011) noted that strikingly higher levels of satisfaction in faith-based hospital relative to the public facility. They noted that the public facility patients were dissatisfied due to low

patient responsiveness – and suggest that the faith-based "may be more patient-centred as compared to public hospitals.

Lievens *et al.* (2011) conducted a study and noted that staff in a faith-based facility were more respectively than those in a public facility. The findings of Lievens *et al.* (2011) agree with Otani and Kurz (2004) believe behavior of doctors, nurses and hospital staff, patients" education, interactions of doctors and staff, moral support is more influential factors to judge patients satisfaction. Though Makinen *et al.* (2011) in a study in Ghana found that there was no difference between provider types in relation to patient satisfaction, consumers noted more courteous services is a distinguishing feature of Faith-based facility providers. The study done by Wodon (2013) in America shows that satisfaction dimensions include more social conversation, courtesy, clear communication and information, respectful treatment, length of consultation and waiting time. The findings of Wodon (2013) supports Muhandwa *et al.* (2008) results of a study on Patient Satisfaction at the Muhimbili National Hospital (Public hospital) in Dar es salaam, Tanzania which found that patients expressed dissatisfaction with the attitudes and behaviors of health personnel, including doctors and long waiting times. Another survey conducted in Ethiopia by Lemessa and Salomon (2001) showed a significant association between satisfaction and perceived length of time spent with health care provider for physical examination and consultation, with longer time spent associated with higher satisfaction level these dimension in all establishment of health service make patients satisfied with service offered. This supports Gilson (2005) who highlighted that one of the factors that influence quality health care is efficiency. The "efficiency" of service refers to promptness of the care given to patients, including issues like waiting time before consultation, duration of consultation time spent with the doctor to attend to a patient

subsequently quick response to emergencies, quick dispensation (Gilson,2005). Further Nethi and Suresh (2012) identified various factors which influence customer's satisfaction of services. These include efficiency, confidence, helpfulness, personal interest and reliability (Nethi and Suresh, 2012). This agrees with the study done in Uganda in faith-based facility by Lievens *et al* (2011) who identified responsiveness as an important component of service quality and characterizes it as the willingness of the staff to be helpful and to provide prompt services that the patients were satisfied within faith-based as compared to public hospitals. Few studies in Kenya have identified factors influencing patient satisfaction. For instance a cross-sectional survey by Nyongesa *et al.* (2014) highlighted factors contributing to patient satisfaction at Pumwani Maternity hospital Nairobi. These were availability of health care providers, cleanliness of the facility, cost of the services, communication, waiting time, and availability of health care service, drugs and equipment were some of the factors influencing patient satisfaction.

Another study by Wanjau *et al.* (2012) was conducted on Factors Affecting Provision of Service Quality in the Public Health Sector: A Case of Kenyatta National Hospital found that low employees capacity, low technology adoption, ineffective communication channels and insufficient fund affect delivery of service quality to patients in public health sector affecting health service quality perceptions, patient satisfaction and loyalty. There was no known study that used comparative analysis of service quality dimensions in faith-based hospitals and public hospitals. A research conducted in America in 2002 by Agency for Healthcare Research and Quality (AHRQ) in both public and faith-based facilities revealed that there are a number of factors that appear to shape patient expectations such as word-of mouth communication, or what patient hears from other patients, is a strong determinant of

patient satisfaction. The study also, reported that the personal needs of a patient, in terms of time sensitivity, specialized care, preventive advice, or just plain empathy, all influence patients' expectations for upcoming health care experience. Further Andeleeb (2001) indicated that communication with patient is vital to delivering service satisfaction because when hospital staff takes time to answer questions of concern to patients, it can alleviate many feelings of uncertainty. In addition, when the medical tests and the nature of the treatment are clearly explained, it can alleviate their sense of vulnerability. This component of service is valued highly as reflected in the in-depth interviews, and influences patient satisfaction levels significantly (Andeleeb, 2000). There are three core themes to assess the patient provider interaction: manner, communication, and relationship. Manner describes the attitude and behaviour of a service provider (Dagger *et al.*, 2007). Communication reflects the "interactive nature of the interpersonal process" (Wiggers *et al.,* 1990). Communication includes the "transfer of information between a provider and a customer and the degree of interaction". For instance, "They have good communication skills" and "They listen to me attentively" (Wiggers *et al.,* 1990). The final theme, relationship, refers to the "closeness and strength of the relationship developed between a provider and a customer" (Beatty *et al.,* 1996; Zeithaml and Bitner, 2000 and Weitzman,1995). Another study in Poland by Szyca *et al.* (2012) results indicated that the factors pertaining to empathy, and health provider communication with the patient had very significant influence on patient satisfaction in both public and faith-based hospitals.

Another study conducted by Curry and Sinclair (2002) shows that improving patient satisfaction by enhancing communication with patients and increasing their access to information relating to their condition influence patients satisfaction and its treatment.

The findings by Tonio *et al.*(2011) indicates that items reflecting information receiving about the undergoing treatment does not have a major influence on patient satisfaction. Saila *et al.* (2008) rated effective communication as the key to patient satisfaction. While Bensing *et al.* (2000) concluded that communication is the pathway to medicine that is patient-oriented instead of disease-oriented. Another study by Frohna *et al.* (2001) revealed that to be effective, communication must be a two-way process – both physician and patient need to offer and accept information about his/her health concerns, even if they do not seem relevant to the physician. The finding of Curry and Sinclair (2002) on the influence of information on patient satisfaction disagreed with findings reputed by Tonio *et al.*, (2011) that items reflecting information receiving about the undergoing treatment does not have a major influence on patient satisfaction. There is a need for another study to be carried out to justify the above argument and for the best results a comparative study is preferable.

A study done by Polluste *et al.* (2000) found that patients' opinions are an important tool in evaluation of health care systems. The factors related to patient-doctor communication were considered more important than amenities in this study. Patient's evaluation of the doctor's competence, comprehensibility of explanations given by the doctor, and cleanliness and comfort of the health provider were factors which significantly influences the degree of satisfaction (Polluste *et al.*, 2000). Findings of Kirby (2005) in America show that communication improves patient satisfaction. The mentioned studies have been carried out in hospitals as indicated above but few studies have reputed comparative analysis of service quality dimensions in FBO hospitals with public hospitals.

In the study done by Tucker and Adams (2001) suggested that quality variables could include caring, empathy, reliability, and responsiveness. Satisfaction variables were access, communication, and positive outcomes of the treatments. A study by Boshoff and Gray, (2004) in South Africa demonstrated that the service quality dimensions that influences on loyalty and accumulative satisfaction, significantly were empathy of nursing staff and assurance.

2.1.4 Health Care Outcome and Patient Satisfaction

The long-term survival of hospitals depends on loyal patients who come back or recommend the hospital to others (YogeshPai *et al*., 2011). Patients satisfied are more likely to continue using the health care services than the unsatisfied ones, maintaining their relationships with specific health care providers and complying with the care regimens (Yousef and Mohamed, 2011). Patients have certain expectations before their visit and the resultant satisfaction or dissatisfaction is the outcome of the treatment for instance relief of pain and improvement in symptoms or mobility (Andrabi *et al*., 2012) in both public and faith-based hospitals. Research done by Hibbard *et al.*(2005) argued that if hospitals reputation is affected due to some attributes like high mortality, increased infection among admitted patients or no improvement in symptoms or mobility, this results in reduction in utilization of health service and patient satisfaction.

Research conducted by Vera (1993) shows that good quality also offers practical benefits to patients. Good- quality care makes, for example, contraception safer and more effective. Poorly delivered services can lead to infections, injuries, and even death. Interviews with clients in Chile, for example, found that good- quality clinical

services reduced clients' fears, increased their confidence in the care received, and generated loyalty to the clinic (Vera, 1993).

2.2 Perception of Patients on Service Quality in Public and Faith-Based Hospitals

Service quality is the extent to which service meets customers 'needs or expectations. Quality improvement means any process or tool aimed at reducing the quality gap between perceived and expected service in systemic and organizational functions according to the dimensions of quality (Pui-Mun *et al.,* 2006). SERVQUAL model based on five service quality dimensions (Tangibility, Reliability, Responsiveness, Assurance and Empathy) has been used by most of the researchers in the evaluation of service quality (Wilson *et al.*, 2008; Bennett and Barkensjo, 2005; Negi, 2009). Not surprisingly, the model and its measure have been widely debated by marketing academics. For example Taylor (2002) have suggested that quality can be predicted adequately by using perceptions alone rather than using different scores and has suggested that in specific service situation, it may be necessary to delete or modify some of the SERVQUAL dimensions or even introduce new one. For instance Zineldin (2006) implemented 5 Quality model of the service quality to evaluate and measure patient satisfaction. The model consists of 5 dimensions of service quality; quality of object, quality of processes, quality of infrastructure, quality of interaction, and quality of atmosphere. Zineldin (2006) shows that all together 5 dimensions result in health care service quality which can affect the patient satisfaction. The models of Zineldin (2006) shows that all the dimensions are functions of service quality, which leads to patient satisfaction. Different researchers have established and criticized the existing models for measuring service quality (Taylor, 2002; Zineldin, 2006).

Few studies in Africa have attempted to asses perception of patients on public and faith-based hospital service quality. For instance, Odaga (2004) examined the community's perspectives and perceptions on quality of health care delivery in two Uganda district and found that problem with public facilities was unavailability of drugs, equipment, inadequate staff and low level of cleanliness similarly with Babikako *et al.* (2011) who carried out a cross-sectional evaluation study (2007-2008) on satisfaction of adult TB patients attending public and faith- based hospitals for TB treatment in Kampala in Uganda found that patients at public hospitals experienced significantly lower levels of satisfaction with technical quality of TB care, responsiveness to patient preferences. Differences in satisfaction suggest differences in public/faith- based service delivery was more patient-centered, Shojo *et al.* (2012) performed a survey in Ghana on satisfaction with services and reasons for choosing faith-inspired providers, comparing public facilities the findings shows that qualitative data suggested better satisfaction with faith-inspired providers, mostly due to availability of services and relationships between clinic staff and patients. While Mliga (2003) undertook a study on the relationship between quality of care and organizational structure of services in faith- based and public health providers in Tanzania found that technical measures and medicine stocks, church facilities performed better than public. Satisfaction rates were highest for clients though the clients valued the service provided by public facilities relative to the cost of those services, church facilities services were thought to be too expensive.

Another study also was undertaken in Nigeria by Nwabueze *et al.* (2010) on comparative assessment of patients' satisfaction with ambulatory HIV/AIDS care in a faith- based hospital and public tertiary hospital in Anambra State found that the rating of patient satisfaction drivers like waiting time, confidentiality, hospital

structure and environment were higher in the faith-based facility. Overall patient satisfaction with HIV/AIDS services was rated higher in the faith-based facility, despite more concerns about higher user fees. There was no known comparative study that had focused on assessing patients' perception on service quality in public and faith based hospitals in Kenya.

Astudy done by Mwabu *et al*. (2004) in Tanzania compared patients' perception of public and faith based hospital service quality across different dimensions. Government owned buildings were rated as the worst when compared with those owned by religious organisation and individuals. Findings of Mwabu *et al*. (2004) further shows that patients in communities that are served by both public and faith-based health institutions prefer faith- based health facilities to public ones. The main reasons were they are generally slow in the process of care in public health facilities, unavailability or inadequacy of drugs, and poor attitude of staff toward patients. Research findings by Mwabu *et al*. (2004) agrees with Rakodi (1996) findings that public health facilities are perceived to be slow, lack adequate drugs, and have staff that are less motivated in their work and committed to patients. Another study carried out by Levin *et al.* (2003) in Uganda, Malawi and Ghana found that (6) faith- based facilities generally score higher on process indicators and client satisfaction than did the (6) public facilities. Another baseline survey was done by Lindelow *et al.*(2003) in Uganda indicated that satisfaction was found to be higher in faith-inspired hospital than in public facilities in areas such as friendly service, information about ailment, prompt attention, and information about charges.

A study was conducted in Kenya on Women's satisfaction with delivery care in a cluster or informal settlements in Nairobi and it was found women's service quality

varied by facility type, and the cost of delivery at the faith-based hospital was significantly higher (Bazant and Koenig, 2009). However, dissatisfaction was greater among women who gave birth at public hospitals than at faith-based facilities in the informal settlements. The faith-based hospital received the highest satisfaction ratings (Bazant and Koenig, 2009) though the study was done in Nairobi, Kenya did not use SERVQUAL dimensions to analyze data.

Descriptive comparative cross-sectional study was done by Nwabueze *et al.* (2010) in Nigeria and found that more patients complained of a negative attitude of staff at the faith-based facility but overall patients' perception of care by all staff was significantly higher at the faith- based facility than the public one. Rating of patient satisfaction drivers like waiting time, confidentiality, hospital structure and environment were higher in the faith-based facility. Overall patients' satisfaction with HIV/AIDS services was rated higher in the Faith-based facility, despite more concerns about higher user fees. Another client satisfaction survey in Nairobi Kenya indicated that patients who used faith-based facilities reported higher levels of satisfaction (80.8 %) than patients using public facilities (MOMS& MOPHS, 2009). On the contrary, a study done on maternal and newborn healthcare by Widmer *et al.* (2011) noted that health services provided by FBOs were similar to those offered by public, however, the quality of care received and the satisfaction were reported to be better. Other similarly study by Schmid *et al.*(2008) conducted a broader scoping literature review on faith-inspired health care in sub-Saharan Africa, and noted a dearth of data and evidence which directly compared the scope or quality of faith-inspired health services. Several studies have been carried out in faith-based hospitals as indicated above but few studies have reputed comparative analysis of quality of healthcare in faith-based hospitals and public hospitals.

The study was done by Nwabueze *et al.*(2010) compared patients' satisfaction with ambulatory HIV/AIDS care in a Catholic secondary hospital and public tertiary hospital in Nigeria; and Babikako *et al.*(2011) also compared the satisfaction of patients receiving TB services at a tertiary public teaching hospital and a Faith-based hospitals in Kampala Uganda. Both of these fairly different studies found significantly higher levels of patient satisfaction at the faith-inspired facility than the public facility – even though in both cases the FBO was a lower level facility with less structural or technical assets. According to Babikako *et al.* (2011) the observed differences in satisfaction suggest differences in public-private healthcare delivery, and that this might be a result of the faith-based facility care being more 'patient-centered'. Another study conducted by Nwabueze *et al.* (2010) supports the view that interpersonal issues, such as health workers' concern for the patient rate significantly higher than the medical sophistication of the facility. The same studies also evaluated patient's satisfaction on two patient medical conditions (HIV and TB) but could not give a clear conclusion on differences in satisfaction in public and faith-based hospitals.

In Tanzania, Mliga (2003) found that clients visiting public facilities did not receive the medicines that were prescribed to them. Findings of Bazant and Koenig *et al.* (2009) concluded that higher satisfaction was found in Faith based facilities most likely reflects the high-cost provision of care that was affordable to fewer women. The studies carried out by Gemignani and Wodon, (2012) in Burkina Faso, Andin Ghana by Shojo *et al.*(2012) found evidence of higher levels of satisfaction in Islamic than in public facilities, much in the same way as what is observed with faith-based facilities. According to Curry and Sinclair (2002) a distinguished feature of customers of health care in comparison with those of other services is that customers

of health care enter or initiate the service interaction with the provider of care, in a state of either physical or psychological discomfort, or both. Often, they may not be the best judge of the quality of service interaction with the provider, since they are not fully aware either of the extent or the nature of their illness, or require the care of an attendant during their stay in the hospital this were (Curry and Sinclair, 2002).

In a research done by Taner and Antony (2006) which examined the differences in service between public and private hospitals in Turkey; the results indicated that inpatients in private hospitals were more satisfied with service quality than those in public hospitals. Similarly a study conducted by Makinen *et al.* (2011) shows differences in perception of patients on quality of service between public and private hospitals and not with faith- based hospitals. Another study by Andaleeb *et al.* (2007) in Bangladesh found that service providers are busy working with private clinics, unavailability of drugs were identified as important reason for people's dissatisfaction about public health facilities. Several studies have been carried out in public hospitals as indicated above but no study has shown comparative analysis of quality of healthcare in faith-based hospitals and public hospitals.

A study done by Leonard and David (2000) reported that public health services have failed to provide reliable and good quality healthcare despite the fact that patients exhibit willingness to pay for quality healthcare. Faith- based healthcare providers seem to be running successful healthcare facilities for which even poor patients are willing to pay (Leonard and David, 2000). Another study was conducted in Bangladesh on Patients' Satisfaction with Public Health Care Services and found that in most cases people perceive that the quality of doctor in public hospital is good; the issue of dissatisfaction arises when they are less attentive at the time of working in

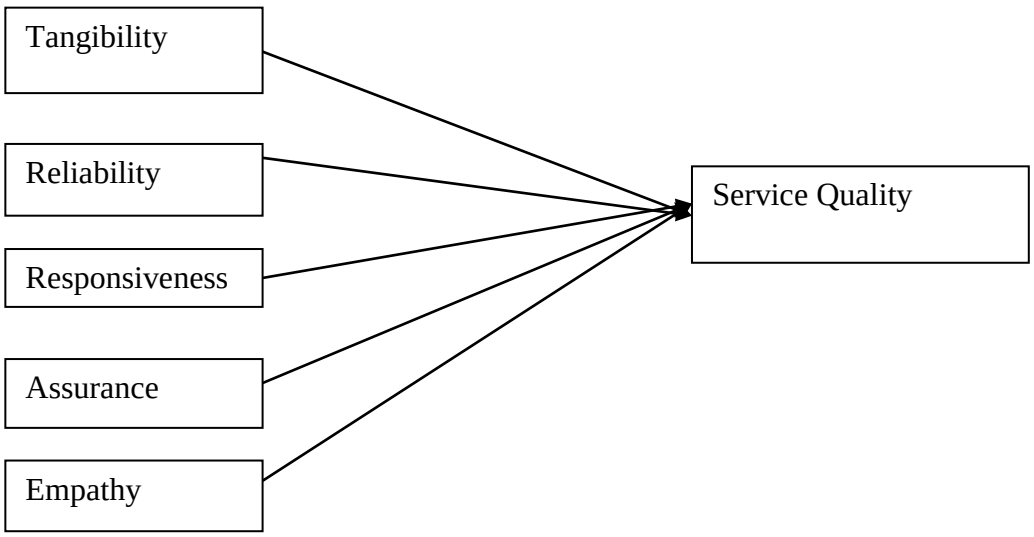
the hospitals (Muhammed and Mohammed, 2015). In Bangladesh, for example, public providers ranked lower than private providers (faith inspired facility) on scale-based surveys in which patients assessed the diagnostic explanation given them, courtesy of staff, cleanliness of facilities, capacity building, and the availability of certain medical inputs (World Bank, 2005). A study conducted in India found that patients were seen for longer durations, were more likely to have a physical examination during their visit, and were more likely to have their diagnosis explained to them by private sector physicians than public sector ones (Bhatia and Cleland, 2004). One interview-based study in Ghana suggested that waiting times among public sector facilities could be longer for the same condition than private sector facilities by one or two hours (World Bank, 2011). Women living in rural Nigeria also reported preferring faith-based obstetric services to public services because doctors were more frequently present at the time of patient presentation (Brugha and Pritze, 2003).

Public sector provision was associated with higher rates of treatment success for tuberculosis and HIV (Chengsorn *et al*., 2009; Bisson *et al*., 2006) as well as vaccination (Howard and Roy, 2004; Soeung *et al*., 2008). For example, in Pakistan, a matched cohort study in Karachi found that public sector tuberculosis care resulted in 85% higher treatment success rate than private sector care (Akhtar *et al*., 2011). In Thailand, patients seeking care in private institutions had significantly lower treatment success rates for tuberculosis, which was attributed to a three to five time's greater likelihood of being prescribed non-WHO-recommended regimens than in the public sector (Chengsorn *et al*., 2009).

2.2.1 Theoretical Framework

The most widely used tool in service sector industry is SERVQUAL; this tool was developed by Parasuraman *et al*. (1985) who empirically explored the relationship between customers‟ expectations and perceptions to prove this theory. A number of authors have supported SERVQUAL model. It can be generalized in all service sectors around the world; the witness is various studies conducted in different environment have adopted this tool, for an example Alexandria *et al.* (2002) applied SERVQUAL in Greece Hotels, whereas Eleonora (2009) used this tool first time in Greece National hospitals and found it adjustable, applicable and reliable. In this study SERVQUAL model has been used because of its popularity and usage in different service industries specially Health and education throughout the world though the literature on study done by use of SERVQUAL model in Kenya is limited. Since then, many marketing researchers have argued that neither disconfirmation theory nor expectation scores have any effect on customer satisfaction, (Carman, 1990; Cronin and Taylor, 1994; Buttle, 1996). Instead, the perception scores have been mainly recommended for measuring service quality as it has higher predictive validity of customers' satisfaction (Cronin and Taylor, 1992).

The SERVQUAL is paired scales, have expectation and perception side both on the scale. Most of the studies assess both the expectation and perception; the current study only assessed the perception side since it has higher predictive validity of customers' satisfaction as indicated by Cronin and Taylor, (1992). One side of the scale has been used in this study that is perception of patients their actual experience. Their expectations have not been compared because the study does not encompass gap analysis objectives.



Source: Parasuraman *et al*. (1985)

Figure 2.1: SERVQUAL Model (Perception side)

2.3 Kenya Ministry of Health Quality Standards

In order to realize the national vision of providing accessible, affordable and quality health care for all Kenyans, the Ministry of Health mainstreamed Quality Assurance into the reform process through the National Health Strategic Plan II (2005-2010) (MOH, 2005). The Kenyan Health Standards and the Master Checklist form a core element of Kenya Quality Model (KQM). KQM was developed and introduced in 2001 by Department of Standards and Regulatory Services (DSRS) in the Ministry of Health (MOH). KQM promotes quality and quality improvement efforts to be 'built-in' and fully integrated in the health care system. KQM integrates evidence-based medicine (EBM) through wide dissemination of public health and clinical standards and guidelines with total quality management (TQM) and patient partnership (Mboya and Michael, 2003).

The Kenya Quality Model is designed to integrate two quality improvement approaches: Firstly, a standards approach to ensure delivery of safe and effective health services and secondly, the gradual introduction of quality management to

health managers and service providers. The Department of Standards and Regulatory Services provides leadership in standardization and regulation. The Kenyan Health Standards in combination with clinical and public health standards and guidelines state the expected performance levels within the Kenyan Health System, including the public and private sector. The development and revision of standardization and guidelines shall be evidence-based (EBM approach), consider the perspective of communities and respect clients' rights. The Master Checklist based on the Kenyan Quality Standards represents the main tool to assess if expectations are being met. Compliance with standards shall be monitored through self-assessment by providers and verified by Health Service Inspectors. Health Service Inspectors will assist to ensure compliance with minimum standards to ensure safety and minimize the risks of adverse effects of health services.

Kenyan health standards on infrastructure ensures that the health facility and its grounds are planned and managed in support of ministry of health policy and strategy and the condition of the facility complies with Kenyan Health Laws and Regulations and hospital quality statements as listed in (Appendix 12). It is not however clear to what extent faith based and public hospitals within the study areas complies to Ministry of Health Quality Standards as established by department of standard and regulatory services (MOH, 2002).

The master checklist and the Kenya health quality standards were developed for institutions to use as a guideline on the issues of quality health care services the list included; Infrastructure such as compound well managed, signboard and direction clearly displayed, Kitchen hygienic and guidelines for food processing are available and known by kitchen staff and adhered, infection prevention program is in place and

implemented within annual plan, properly managed laundry facilities, facility has an adequate and properly managed mortuary, safe water is available at all times, clean toilets / latrines for staff and patients, a waste disposal facility including placenta pit and incinerator, functioning drainage system for sewage and rain water, power supply reliable and sufficient, security and safety to protect the facility from theft and burglary, Standard safety (firefighting and power safety), drug supply are available in sufficient quantity, patient uniforms and linens are available in acceptable condition, in-patient receives regular meals of acceptable nutritious value, basic office supplies are available in sufficient quantities, adequate transport means, referral guidelines and protocols are available (MOH, 2002).

Kenyan health standards sees that equipment and diagnostic facilities are planned and managed to support ministry of health policy and strategy to deliver safe and effective health services and implement successful PHC programmes. All equipment and diagnostic facilities are subjected to regular maintenance and kept in good working order, to ensure that the equipment and diagnostic facility are regular maintained and kept in good working order such as examination coach, stretcher, screen, delivery coach, weigh scale, refer delivery set, hematology analyzer, oxygen, X-ray, suction machine, baby incubators, ultra sound machine, microscope, autoclave and centrifuge (MOH, 2002). Process quality standards included interpersonal factors, availability of information, continuity of treatment, waiting time and the quality of treatment.

System quality checks through the service delivery management structures include a number of tools: medical record audits; supervisory checklists with client care issues; a supervisory checklist observing consultations; and holding meetings to discuss client care problems or trends in client utilization data from the HMIS. Other quality

assurance mechanisms include facility management committees, client and employee satisfaction surveys, monitoring by MOH and Treasury supervisors (MOPHS, 2008). Policies can be laws, documents, procedures, and guiding principles, statements of intent, working frameworks to achieve certain objectives, rules and regulations (Walt, 2004). Examples of existing policies in Kenya include the Kenya Policy Framework for Health, Clinical guidelines for HIV, Malaria, Harmonized clinical guidelines, referral guidelines for level 2,3,4,5, and 6 health facilities, National Health Sector Strategic plan and Standard Operating Procedures. Also hospitals quality statements see the lists of quality policy statements of the study hospitals (Appendix12).

A cross- section survey was carried out by Njenga (2013) to assess the barriers associated with the use of the Kenya Quality Model in St. Francis community hospital Kasarani, Nairobi, which found that the use of KQM was low with 89.7% of the respondents reporting none-use. From literature search there was no known comparative results on quality standards in faith- based with public hospitals. Another a cross-sectional study was carried out in Kiambu county hospital by Ngugi (2002) and found that structural aspects of care, some basic essentials such as water, light, toilets, equipment for care of the newborn and an adult weighing machine were lacking. The quality of care did not meet the expected standards.

According to Wangombe *et al.* (1998) regulations and standards such as licensing and inspection, which need to be observed in setting and running healthcare facilities act as safeguards for maintenance of quality care? Licensing prevents unqualified persons from practicing, facilitates recognition by the government, and therefore enhances confidence in the community. For instance in Mongolia, a government agency, State Professional Inspection Agency, is in charge of the monitoring and implementation of

regulations and standards related to health system and is responsible for ensuring whether or not the health facilities and staff follow the standards (Bolormaa *et al.*,2007). The Agency audits hospitals every six months and is entitled to give penalties, even to revoke a license, if there is evidence that medical personnel and health institution do not follow standards

2.4 Conceptual Framework

This section summarizes the ideas from past literature and brings out the contribution for this study. The general idea from literature is that there is a relationship between customer/patient satisfaction and service quality dimensions that could be evaluated by the use of SERVQUAL model (Parasuraman *et al*., 1985). The SERVQUAL instruments consist of 5 dimensions: Tangibles. Physical facilities, equipment and appearance of personnel, Reliability - ability to perform the promised service dependably and accurately, Responsiveness-willingness to help customers and provide prompt service, Assurance (including competence, courtesy, credibility and security), knowledge and courtesy of employees and their ability to inspire trust and confidence and Empathy (including access, communication, understanding the customer),caring and individualized attention that the firm provides to its customers. Only one side of SERVQUAL has been used because researcher was interest to analyze the perception of patients not the gap between perception& expectations of the patients as presented in the theoretical framework. Also the conceptual framework illustrates patient's perceptions on service quality and with Ministry of Health Quality standards.

Independent Variables **Dependent Variables**

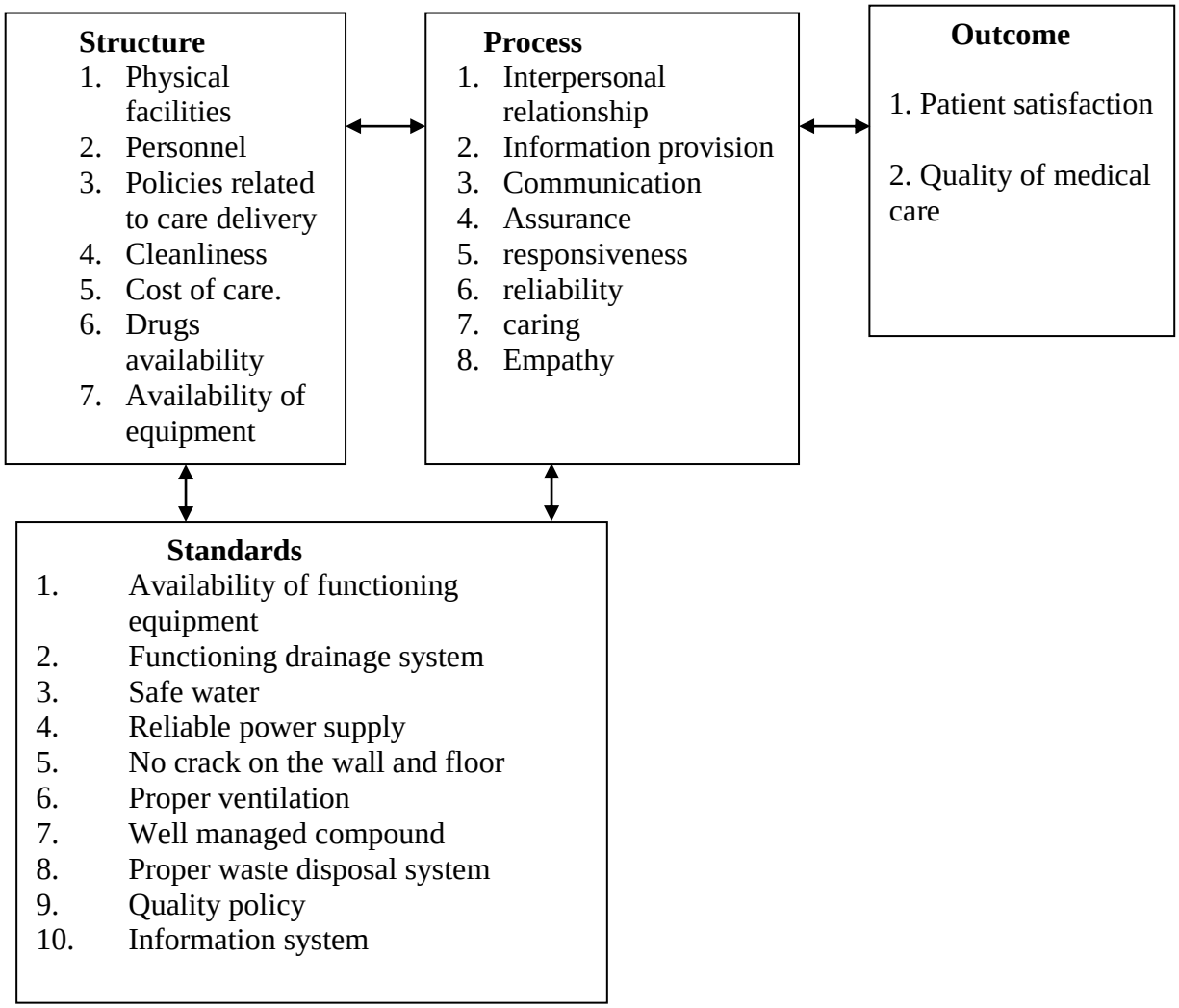


Figure 2.2 Conceptual framework

Source: (Author, 2016)

CHAPTER THREE

METHODOLOGY

3.1 Introduction

This chapter is organized as follows; study area, study design, study population, sample size, sampling methods, data collection, data analysis, study limitations and ethical consideration.

3.2 Study Area

Kiambu County borders Nairobi and Kajiado Counties to the South, Machakos to the East, Murang'a to the North and North East, Nyandarua to the North West, and Nakuru to the West (Ministry of Devolution and Planning ,2013). It is located between latitude 00^{o} 25' and 1^{o} 20' South and longitude 36^{0} 31' and 37^{o} 15' East. The County occupies an area of 2,543.5 Km^2 of which 1,878km^2 is arable while 649.7km^2 is non arable and 15.5 Km^2 is under water mass. It comprises ten sub-counties namely: Gatundu, Gatundu North, Ruiru, Thika East, Thika West, Githunguri, Kiambu, Limuru, and Kikuyu with 29 divisions, 95 locations and 236 sub-locations. According to the Kenya Population and Housing Census (KPHC) of 2009, it had total population of 1, 766,058 (870,200 males and 892,857 females) persons. Kiambu town is the County headquarters. Kiambu County is located in the Central highlands of Kenya in the former Central Province, close to the capital, city Nairobi. Kiambu town is the commercial and administrative capital of Kiambu County. It's almost considered a suburb of Nairobi with most middle class renting houses here while they commute daily to Nairobi for work. Kiambu its geographical coordinates are 1° 19' 1" South, 37° 21" 33" East. Kiambu has a population of 1,623,282 according to Kenya bureau of statistic, 2009. See maps of study area below.

Figure 3.1: Map of Kenya indicating study area.

Source :(Mophil, 2011)

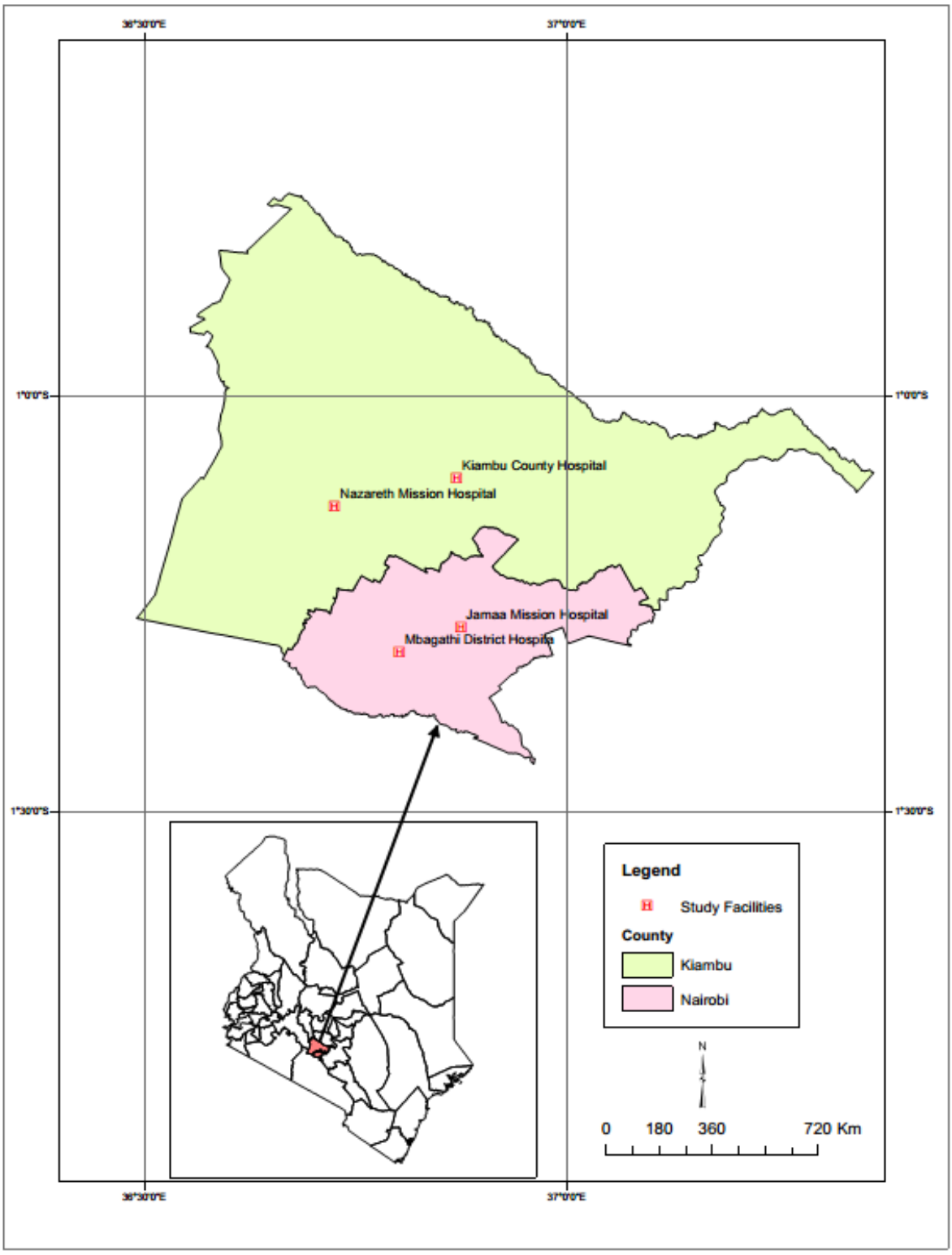


Figure 3.2: Map of Kiambu and Nairobi Counties.

Source: Dept. Cartography KNBS.

Nairobi lies on the central Kenyan plateau at an altitude of about 1,680 m (5,500 feet), its geographical coordinates are 0°26"56" South, 37°6’ 14” East. Nairobi County has a population of 3,138,369 (1,605,230 males and 1,533,139 females) according to Kenya Bureau of statistic, 2009. It borders Kiambu County to the North and West, Kajiado to the South and Machakos to the East. The county has a total area of 696.1 Km^2 and lies between longitudes 36^o 45’East and latitudes 1^o 18’ South. It lies at an altitude of 1,798 metres above sea level. The high rate of urbanization is a major contributing factor to the high population growth rate. This has put a lot of pressure on the existing infrastructural facilities such as schools, health facilities, water provision and sewerage system. Some of the health facilities found in Kiambu includes; Kiambu county Hospital, Kijabe Hospital, PCEA Kikuyu Hospital, Ruiru Sub-County Hospital, Thika level five Hospital, Gatundu County hospital, Tigoni hospital, Nazareth hospital, St. Mulumba hospital, Kalimoni mission hospital and Immaculate Heart of Mary Hospital. Private hospitals in Kiambu County include Thika Nursing Home, The Aga Khan Hospital, Mt. Sinai Hospital, Thika, Plains view Nursing Home; Ruiru, Beta Care Hospital Limited; Githunguri and Naidu Hospital in Thika among others. Some of health facility in Nairobi County they include; Mama Lucy Kibaki District Hospital, Mbagathi District Hospital, Pumwani Maternity Hospital, Armed Force Memorial hospital, St. Mary mission hospital, St. Francis Community hospital, Jamaa mission hospital among others.

Nairobi as a city with high population and Kiambu a neighboring County, the hospitals experience shortage of drugs and medical supplies, unaffordable out-of-pocket costs for health services’ consumers, child nutrition problems, poverty, HIV/AIDS, acute respiratory infections, malaria, diarrhea, poor quality of care due to overcrowding of the patients. The most common diseases that leads to patients

admission in Kiambu County they include; URTI, diarrhea, pneumonia, HIV/AIDS, meningitis, neonatal sepsis, RTA, hypertension, diabetes, heart condition, TB, skin diseases, fractures, road traffic accidents among many others while in Nairobi County the most common diseases are; disease of respiratory system, diarrhea, TB, disease of the skin including wounds, fractures, pneumonia, malaria, HIV/AIDS, road traffic accidents, hypertension, diabetes, meningitis, neonatal sepsis, heart conditions, malnutrition among many others.

3.2.1 Structure of the Kenyan Health Care Systems

Structure of the Kenyan health care system comprises the public sector, private sector, Faith-based organizations, NGO‟s and the local authority (MOH, 2005). Health services are provided by a network of over 7,312 facilities countrywide, with the public sector accounting for 48% of all facilities. The private sector provides 34% of the health services, faith based organizations 13%, NGO‟s 2% and the local authority 1% (MOH, 2010).

Overall in Kenya, service provision is spelt out within the Kenya Essential Package for Health (KEPH) which also prescribes the structure of the MOH. Health service provision in Kenya is organized around 6 levels. Health services are delivered though facilities at different levels. The national level comprises national referral hospitals, providing rehabilitative and therapeutic services that are level 6 Tertiary Hospitals. The regional level 5 acts as a referral resource for county hospitals, where the former provide specialized care. They oversee the implementation of policy at county level, maintain quality standards and coordinate health activities. The other level is the county hospital level which delivers services and generates their own expenditure plans and budget based on guidelines from the headquarters. Facilities at this level are

managed by the County Health Management Teams. Also level 3 is a health centre, which provides a wide range of curative and preventive services. There is level 2 is the dispensary, which is meant to be the first line of contact with patients but, in some areas, this function falls to the health centres. Dispensaries provide a wide range of preventive and curative health services NCAPD (2004).

The KEHP represents the integration of all health programmes into a single package towards the improvement of health with emphasis on the community level 1of care. The basic preventive and curative services for minor ailments are being addressed through the community package and synergize with services provided by NGOs, privately owned facilities, community and faith-based organizations MOH (2006).

Each county in the country has a county hospital level 4 which is the co-coordinating and referral centre for the smaller units. They usually have the resources to provide comprehensive medical and surgical services. They are managed by medical superintendents.Level four hospitals were chosen purposively as most of level four hospitals are known to handle patients from all classes and with various health problemsin whole County and level 4 hospitals serves as referral hospital for small units in the county.In each County level four hospitals are the coordinating and referral centre for the smaller units. They usually have the resources to provide comprehensive medical and surgical services. County hospitals are the facilities for clinical care at the county level. They are the first referral hospital and form an integral part of the County health system (Muga *et al*., 2004).

A level four hospital should provide the following: Curative and preventive care and promotion of health of the people in the county; Quality clinical care by a more skilled and competent staff than those of the sub- district hospital, health centres and

dispensaries; Treatment techniques such as surgery not available at health centres; Laboratory and other diagnostic techniques appropriate to the medical, surgical, and outpatient activities of the county hospital; Inpatient care until the patient can go home or back to the health centre; Training and technical supervision to health centres; as well as resource centre for health centres at each county hospital; Twenty-four hour services; The following clinical services: Obstetrics and gynecology; Child health; Medicine; Surgery, including anesthesia; Accident and emergency services; Non-clinical support services; Referral services; Contribution to the county-wide information generation, collection, planning, implementation and evaluation of health service programmes. They are headed by medical superintendents (MOH, 2006). There are five main categories of health facility ownership these are public or government, faith-based, private medical clinics and private practitioner and others for example local Authority, prisoners among others.

Table 3.1 shows level 3 to 5 hospitals found in Kiambu and Nairobi Counties.

Table 3.1: Summary of Public and Faith-Based Hospitals in Kiambu and Nairobi Counties

Facility	Category	Level	County	Bed capacity	Total number of patient
Kiambu County Hospital	Public	4	Kiambu	289	315
Gatundu District hospital	Public	4	Kiambu	162	158
JKUAT Hospital	Public	3	Kiambu		
Thika level five hospital	Public	5	Kiambu	265	270
Tigoni Hospital	Public	3	Kiambu	68	60
Ruiru Sub County Hospital	Public	3	Kiambu	20	18
Immaculate Heart of Mary Hospital	Mission	3	Kiambu	20	15
Kijabe Hospital	Mission	5	Kiambu	259	240
PCEA Kikuyu Hospital	Mission	5	Kiambu	218	200
Nazareth Mission Hospital	Mission	4	Kiambu	147	145
St.Mulumba Mission Hospital	Mission	4	Kiambu	80	50
Kalimo Mission Hospital	Mission	3	Kiambu	30	20
Pumwani Maternity	Public	4	Nairobi	200	210
Mbagathi County Hospital	public	4	Nairobi	120	140
Armed Forces Memorial	public	4	Nairobi	114	100
Mama Lucy Hospital	Public	4	Nairobi	100	80
Jamaa Mission Hospital	Mission	4	Nairobi	141	138
St Mary Mission hospital Lang'ata	Mission	5	Nairobi	299	280
St Francis Community Hospital Kasarani	Mission	4	Nairobi	110	80

Source: The directory of hospitals, 2012 and Health record department of the above hospitals.

Health care can be provided through public and private providers. Public health care is usually provided by the government through national healthcare systems. Private health care can be provided through "for profit" hospitals and self-employed practitioners, and "not for profit" non-government providers, including faith-based organizations. Therefore, the study was conducted infaith based and public hospitals of Level four hospitals (Table 3.1); they include; Kiambu county hospital Gatundu Sub-county hospital in Kiambu which Nairobi County they include Mama Lucy Kibaki County Hospital, Mbagathi County Hospital, Pumwani Maternity Hospital and Armed Force Memorial public. Faith- based hospitals were Nazareth Mission hospital, and St. Mulumba Mission hospital in Kiambu County, Jamaa Mission hospital, St. Francis community hospital in Nairobi County.

The study was conducted at Mbagathi County hospital and Kiambu county hospital (Public), Jamaa Mission hospital and Nazareth Mission hospital (Faith based). Kiambu County hospital and Nazareth Mission hospital are situated in Kiambu County while Jamaa Mission hospital and Mbagathi County hospital are situated in Nairobi County. Mbagathi County hospital is a level 4 public facility having a bed capacity of 120 and receives about 140 in-patients daily. The hospital offers the following services; Antenatal clinic, basic emergency obstetric care, curative outpatient services, curative, In- patient services, family planning, Growth monitoring and promotion, HIV counseling and testing, Antiretroviral therapy, Immunization, Prevention mother to child transmission (PMTCT), Theatre services, Home based care, integrated management of child hood illness, X-ray and Ultra scan, Tuberculosis diagnosis and treatment and Dental services.

Kiambu district hospital is a level 4 public facility has bed capacity of 289 and receives about 315 in-patient daily attendants. The hospital offers variety of services that include; Antenatal clinic, maternity services, emergency obstetric care, curative outpatient services, curative in-patient, services, family planning, Growth monitoring and promotion, HIV Counselling and Testing, Immunization, PMTCT, Tuberculosis diagnosis and treatment, Theatre services, Laboratory services and X-ray.

Jamaa Mission hospital is Faith-based hospital owned by religious congregation of Missionary Sisters of Charity; it is a level 4 mission hospital having bed capacity of 141 and serves about 138 in-patients daily. It is located in Makadara in Nairobi County. It offers the following services; Outpatient services, In-patient services, Laboratory services, pharmacy, Antenatal clinic, X-ray, Ultrasound scan, well baby clinic, Maternity, Theatre services, counselling, VCT and Antiretroviral therapy, Dental services, immunization and Physiotherapy among many others.

Nazareth Mission Hospital is Faith-based hospital owned by religious congregation of Franciscan Sisters of Heart of Mary; it is a level 4 mission hospital having a bed capacity of 147 and serves about 145 patients daily located in Limuru in Kiambu County. It offers the following services; Outpatient services, In-patient services, Laboratory services, pharmacy, Antenatal clinic, X-ray, Ultra scan, well baby clinic, Maternity, Theatre services, counselling, VCT and Antiretroviral therapy, Dental services, Physiotherapy, Natural family planning, Growth and monitoring and promotion, Home based care, Immunization, PMTCT among many others.

3.3 Study Design

A descriptive cross-sectional study of client perception on quality of health care offered to in-patients in public and faith based hospitals in Kiambu and Nairobi was conducted; The descriptive survey method was preferred because it ensures complete description of the situation, making sure that there was minimum bias in the collection of data and finding out the what, where and how of a phenomenon Kothari (2008).

3.4 Study Populations

According to Mugenda and Mugenda (2003) a population is an entire group of individuals, events or objects with some common observable characteristics. This study targeted all the in-patients aged 18 years and above who attend health services in level four public and faith based hospitals in Kiambu and Nairobi counties. There are a total of 4 (level 4) hospitals in Kiambu County out of which 2 are public hospitals (Kiambu County hospital and Gatundu County hospital) and 2 are faith based hospitals (Nazareth Mission hospital and St. Mulumba mission hospital). On the other hand there are a total of 6 hospitals in Nairobi County out of which 4 are public hospitals namely Pumwani Maternity; Mbagathi; Armed Forces and Mama Lucy hospital while 2 are faith based hospitals namely Jamaa Mission and St. Francis Community hospitals. On a daily basis the total number of in-patients attending the 10 level four hospitals in Kiambu and Nairobi Counties is approximately 1398 translating to approximately 125820 in a span of three months that study lasted see table below. On the other hand on a daily basis the 4 hospitals of the study serve 738 translating to 66420 in three months of the study.

Table 3.2: Summary of Level Four Public and Faith-Based Hospitals in Kiambu and Nairobi Counties

Facility	Category	Level	County	Bed capacity	Total number of in-patients per day
Kiambu County Hospital	Public	4	Kiambu	289	315
Gatundu District hospital	Public	4	Kiambu	162	150
Nazareth Mission Hospital	Mission	4	Kiambu	147	145
St.Mulumba Mission Hospital	Mission	4	Kiambu	80	40
Pumwani Maternity	Public	4	Nairobi	200	210
Mbagathi County Hospital	public	4	Nairobi	120	140
Armed Forces Memorial	public	4	Nairobi	114	100
Mama Lucy Hospital	Public	4	Nairobi	100	80
Jamaa Mission Hospital	Mission	4	Nairobi	141	138
St Francis Community Hospital Kasarani	Mission	4	Nairobi	110	80
Total		10		1463	1398

Source: The directory of hospitals, 2012 and Health record department of the above hospitals (2012).

3.5 Target Population

Target population of the study was 66,420 the in- patients who were admitted during study period in the study hospital in span of three months (**Source**: hospitals Health records).

Table 3.3: Target Population

Name of Hospital	Category	County	**Total number of in-patients per day**
Kiambu county hospital	Public	Kiambu	315
Nazareth Mission hospital	Faith- based	Kiambu	145
Mbagathi district hospital	Public	Nairobi	140
Jamaa Mission Hospital	Faith-based	Nairobi	138
Total			738 daily in-patients
Total in 3 Months			738 x 30 = 22140 x 3 = 66420

Source: Departments of health information systems of the study hospitals.

3.6 Sample Size Calculation

The sample size was determined using Fisher's formula derived from (Mugenda and Mugenda, 1999).

$$n=\frac{Z^2pq}{d^2}$$

Where

n = the desired sample size (if the target population is greater than 10,000).

z= the standard normal deviate at (in this case 1.96) which corresponds to 95%

p=proportion of the target population estimated to have the desired characteristics (0.5)

q = 1-p (proportion without the characteristic is 0.5)

d= the level of statistical significance set at 0.05 degrees of freedom)

The sample size for a population more than 10,000 is.

$$N = \frac{(1.96)^2(0.5)\ (0.5)}{(0.05)^2}$$

$$= 384$$

3.7 Sampling Technique

The study used stratified random sampling to select 384 in- patient from the target population. Proportionanate stratification was used to select the sample size per hospital and per ward. In proportionate stratification, a random sample from each stratum is taken in a number proportional to the stratum's size when compared to the population (Greener, 2008). These strata subsets are then pooled to form a random sample. The sample size in each of the strata was determined as shown in Table 3.4.

Table 3.4: Calculating Proportional Sample Size

Hospital (strata)	Wards	Total number of In-patients	Proportional sample per 384	Proportional sample per hospital	Inpatients per ward	Proportional sample by wards
Mbagathi	Male medical ward	12,600	0.18 of 384	73	1925	13
	Male surgical ward				1850	18
	Female medical ward				3140	11
	Female surgical ward				2230	11
	Maternity ward				3455	20
Kiambu	Male medical ward	28,350	0.4 of 384	164	2480	14
	Male surgical ward				3012	18
	Female medical ward				6742	39
	Female surgical ward				5011	29
	Maternity ward				11105	64
Jamaa	Male medical ward	12,420	0.18 0f 384	72	1814	11
	Male surgical ward				1920	11
	Female medical ward				2628	15
	Female surgical ward				2412	14
	Maternity ward				3646	21
Nazareth	Male medical ward	13,050	0.19 0f 384	75	2154	12
	Male surgical ward				1848	11
	Female medical ward				2984	17
	Female surgical ward				3101	18
	Maternity ward				2963	17
Total		**66,420**		**Sample 384**	**66,420**	**384**

Therefore, the sample size of the patients interviewed was **384**

Source: Health records departments of the study hospitals (2012).

3.7.1 Sampling Procedure

Public and Faith based hospitals were chosen purposively as these two categories of hospitals are known to handle patients from all classes and with various health problems. Level 4 hospitals were chosen since they are the key facilities in counties that deal with co-coordinating and referral centre for the smaller units such as sub-

county hospitals, Health centres, Nursing home, Dispensary and other small clinics. County hospital or level 4 hospital serves the whole population in the County.

The sample population was selected from two faith based and two public hospitals of level four in Kiambu and Nairobi counties were selected by simple random sampling this was done by writing all the names of level four hospitals and the numbers were placed in a container as per county and categories and picking any number in a random (Mugenda and Mugenda, 1999). For example groups and categories included in Kiambu county, public level four were Kiambu county hospital and Gatundu County hospital, faith-based Nazareth Mission hospital and St. Mulumba Mission hospital and in Nairobi County the groups were public hospitals Mama Lucy hospital, Mbagathi district hospital, Pumwani maternity hospital and Armed force Memorial hospital and Faith-based were Jamaa Mission hospital and St. Francis Community hospital.

Sample size in each stratum was determinedproportional to the stratum's size when compared to the population of hospitalised patients as per hospital. Systematic sampling was used to select every 5^{th}patient was interviewed at exit point and the questionnaires were completed by the interviewer for quantitative and qualitative questions, all the in- patient were interviewed at the exit point. If the patient who was selected refused to participate or was unable to answer the questions, the next person was selected as a replacement after the consent. Observation was done by the researcher herself. Interviews were carried out on all days other than Sundays by researcher and research assistants.

3.7.2 Inclusion Criteria

All in-patients of18 years and above that were admitted at the hospitals during the study period and consented.

3.7.3 Exclusion Criteria

1. In-patients who were severely sick and unable to speak

3.7.4 Study Variables

The dependent variable used in the study included Quality (patient satisfaction) and the independent variables were structure these included;Physical facilities, Personnel, Policies related to care delivery, cleanliness, cost of care, drugs availability and availability of equipment, process (Interpersonal relationship, information provision, communication, assurance, responsiveness, reliability and caring), Ministry of Health Quality Standards these includes Availability of functioning equipment, Functioning drainage system, Safe water, Reliable power supply, no crack on the wall and floor, Proper ventilation, well managed compound, Proper waste disposal system, quality policy, Information system and availability of Ministry of health guidelines. The intervening variable was patient perception on public and faith based hospital service quality.

3.7.5 Reliability

The research questionnaire and questions used for the interview were constructed according to study's specific objectives. The questionnaire was pretested at St.Francis Community Hospital and Gatundu Sub- county hospital with similar characteristics with study area. Quantitative reliability was obtained through statistical tests on data collected. The reliability of this study was done by determining the association from the score obtained from different administration of the scales using internal

consistency measure by calculation of Cronbach's coefficient alpha (Cronbach, 1951). The Cronbach's alpha of all service dimensions were calculated to test the reliability of the scale used in the study. The result shows that the reliability coefficients were acceptable for the following constructs: tangibility, reliability, responsiveness, assurance, and empathy. Through reliability analysis Cronbach's Alpha was found to be .962for 384 cases and five variables containing 26 scale questionswhich show that all items in the questionnaire have a positive relationship with each other. A reliability coefficient of 0.7 or higher is considered "acceptable" in most social science research situations as recommended by Churchill (1979) Appendix 8.

3.7.6 Validity

Validity is concerned with error, concerned with consistent or systematic error rather than variable error. Validity tests how well an instrument measures the particular concept it is supposed to measure (Bryman and Bell, 2007). The contents of the study tool were screened out for the appropriateness of the contents**.** Face validity of the tool was done using a pilot study on a group of respondents (The pilot sample was not included in the study sample).The instrument in this study has also criterion validity based on its association with previous research indicators of service quality. SERVQUAL instrument has been tried and tested and can be used comparatively for benchmarking purposes (Brysland and Curry, 2001). SERVQUAL however, benefit from being a statistically valid instrument as a result of extensive field testing and refinement.

3.8 Data Collection

Both qualitative and quantitative methods of data collection were used. Secondary data sources were used to obtain information from recent census, other official statistics and even previous surveys for the purpose of enriching the data collection.

3.8.1 Data Collection Tools

Open ended questions were used to identify dimensions that contribute to patient's satisfaction for qualitative data (Appendix 3).Questionnaire was developed for perception of patients on service offered by faith based with public hospitals. The questionnaire contained structured or closed questions that required respondents exercise judgment on five-point Likert scale was used to ask respondents for scoring (items) ranging from 5= strongly agree to 1 = strongly disagree (Appendix 4). Twenty six instruments were modified from SERVQUAL instruments to reflect the environment in which the study was undertaken; the use of scaling comparable to previous research provides greater reliability for questionnaire.

The SERVQUAL instruments consist of 5 dimensions: Tangibles. Physical facilities, equipment and appearance of personnel, Reliability- ability to perform the promised service dependably and accurately, Responsiveness -willingness to help customers and provide prompt service, Assurance (including competence, courtesy, credibility and security), knowledge and courtesy of employees and their ability to inspire trust and confidence and Empathy (including access, communication, understanding the customer), caring and individualized attention that the firm provides to its customers. Only one side of SERVQUAL has been used because researcher was interest to analyze the perception of patients not the gap between perception & expectations of the patients. Their expectations have not been compared because the study does not encompass gap analysis objectives.

To confirm the compliance by public and faith based hospitals to quality standards as set by the Ministry of Health (2002), facility assessment checklist consisting of 25 items was used to evaluate sample units against ministry of health checklist whether

they are there and their reliability maximum score 1 and minimum score 0 (Appendix 5). Ten selected basic diagnostic equipment that included questions about whether the units were available and in working condition maximum score 1and minimum score 0 (Appendix 6).

3.8.2 Pre-Test

The questionnaires were pre-tested in a study (St. Francis Community Hospital Kasarani) with 40 respondents. The pre- test was administered in a second hospital (Gatundu Sub county hospital) to avoid bias of data when the final survey was carried out. After some minor changes to wording had been made, questionnaires were prepared for the study. St. Francis Community Hospital Kasarani and Gatundu Sub-county hospitals these two hospitals were chosen purposively since they were the only level four hospitals in the study county apart from the study hospitals.

3.8.3 Data Collection Method

Primary data is the source of information, which provides the original and more specific data in order to resolve the research problem. According to Saunders *et al.* (2009) primary data is collecting a new data specifically for a purpose. The study done by Sekaran (2003) also describes primary data as the information collected for the first time by researcher on the variables of research**.** Qualitative and quantitative methods of data collection were used. Primary qualitative data was collected using, open ended questions. The unstructured questionnaires were administered on 384 patients whoprovided data relating to dimensions that contribute to patient's satisfaction. (Note: Data collected was from all sampled patients, but since the first time I was told the sample was big (800) to reduce, that is why analysed only 40 for

qualitative, then after the second defence in consultation with my supervisors I had to re-analyse all the 384 patients).

Interviews were conducted using unstructured or open-ended questions to solicit information on dimensions that satisfies patients on health care service and the feelings of the patients on the nature of services currently being offered to them; their views and recommendations on how they would want the services improved in order to be satisfied and served better and achieve the aspects of quality. All the 384 sampled patients were subjected to open ended questions through administration of questionnaires to solicit information on dimensions that satisfies patients in public and faith-based hospitals. The verbation as per each patient response was noted on the questionnaire paper that was designed for this purpose. Then the information was grouped for content analysis yielded three themes: structure, Process and outcome.

Primary quantitative data was collected using self-enumeration matrix questions rated on a Likert scale and response graded with different values ranging from 5-1; strongly agree scoring 5 and strongly disagree scoring 1 and assessment checklists were used with scoring marks 1being maximum and 0 minimum score. Quantitative study that examines the perception of patient on service quality, a questionnaire was developed to determine the patient's perception on service quality in faith- based and public hospitals as in the literature and specifically the SERVQUAL dimensions. Only one side of SERVQUAL has been used because researcher was interest to analyze the perception of patients not the gap between perception & expectations of the patients. Several statements from SERVQUAL instrument were attached or modified to allow for situational factors such as health care environment. Quantitative study assessed the perception of patients on service offered by faith based and public hospitals using 384

hospitalized patients by use of SERVQUAL instruments consist of 5 dimensions: Tangibility, Reliability, Responsiveness, Assurance and Empathy. The questionnaires were administered at exit point after patient discharge from the ward. The section was used to provide the attitude or perception of respondents on public and faith based hospitals service quality and viewed aspects of hospital process. Respondents were asked to rank how strong they felt about the statement on a 5 point scale ranging from 5= strongly agree to 1 = strongly disagree. Assessment checklists were used to give more information on the existing facilities in the hospital and confirming the compliance of the set standards by ministry of health. Data collection was done for 3 months between May to July 2012.

This study selected research assistants who had medical knowledge on quality of health care service, they took time to explain to patients to be interviewed since the questionnaire were self-administered and patients were able to give correct responses. Four research assistants (2 male and 2 female) were selected on criteria that they were to be knowledgeable in English, Kiswahili and Kikuyu in case some clients do not understand English, health professional who completed college in last three years and understands the aspect of quality health care. The research assistants were trained for two days by the researcher. Qualitative and quantitative data collection was done simultaneously.

3.9 Data Analysis

Completed study tools were checked for accuracy daily by the researcher and where necessary possible follow- ups and corrections made. The analysis was done in three steps, first was sorting and classifying data. Following a review of interview transcripts and related documents, data was then categorized or labeled to identify

units of data. Qualitative data was then categorized into structure, process and outcome that took place during the process of open coding, the aim of open coding was to discover, name and categorize phenomena in terms of their properties and dimensions. Then the qualitative data was analyzed using Atlas. ti (Atlas text interpretation).

Atlas.ti is a software program that was developed by Thomas Muhr in Berlin and released commercially in 1993. It is a qualitative data analysis software program that enables a researcher to manage code, analyze, and output data in a variety of convenient methods, making your data more understandable (Gibbs,2007). Atlas.ti can help researcher "explore the hidden phenomenon within your data" by permitting researcher to collect large bodies of data, including interview transcriptions, PDFs, Microsoft Word documents, html, pictures, and even audio and video recordings. Data can then be coded and analyzed for themes and other information. The programme helps to code and organize the frequency of occurrence of emerging and different pre-determined themes and to identify patterns of issues reported and in categorizing them (Lewins and Christina, 2007).

Data was then entered into Excel for all the patients and Atlas.ti which is capable of pulling data from Excel among other platforms was used to code and organize the frequency of occurrence of emerging and different pre-determined themes. Patterns of issues were reported and categorized. Those that had the highest free were then considered as the ones that had the most impact on the patient's experience. The content categories were chosen and labeled with (structure, process and outcome) to service quality concepts. Data was then entered in a spreadsheet which was imported into Atlas.ti 7.0 for analysis and results exported to Microsoft Word. Quantitative data

was then put in a matrix which allowed visual identification of the spread and concentration of themes represented by categories they included tangibility, reliability, responsiveness, assurance and empathy. All these codes were then noted down in a notebook, a data entry frame sheet was prepared in the computer, and numerical values of all the responses, key punched in systematically.

Both qualitative and quantitative data analysis was performed; qualitative data was analyzed using Atlas.ti 7.0 to extract themes (structure, process and outcome) from obtained category responses from dimensions that contribute to patient satisfaction for objective one. Overall reliability analysis of this study was analyzed using SPSSS version 22.0. Cronbanch Alpha value is .962 for 384 cases and five variables containing 26 scale questions, shows that data is highly reliable. Quantitative data was analyzed using SPSS version 22 statistical package to assess patients perception on service quality and assessment of quality standards for objective two and objective three. Descriptive statistics were derived and used to analyze objective two on perception of patients on service quality by use of percentage, frequencies, mean and standard deviation. Inferential statistical analysis was undertaken to enhance further insights of the data on perception of patient on service quality. Formulated hypothesis was tested using; Chi-Square to test significant differences among the type of hospitals and T test to test the difference in means between public with faith-based hospitals service quality, and this was an equivalent of independent sample T-Test. Descriptive statistic was also used to analyze objective three on compliance of hospitals to Ministry of health quality standard.

3.10 Study Limitation

Due to limitation of time and resources (funds), the researcher was not in position to take a large sample and cover all the departments in the institutions looking at all the elements that affect or influence quality of health care. Despite of the above limitation the researcher addressed them by preparing work plan and budget for the research to ensure that the limited time and finance are accommodated within stipulated time and budget.

When based on exit interviews (as used in this study), there are unavoidable elements of self-selection bias among patients, that is, patients who choose to go to a particular facility are more likely to be satisfied with the quality of care than the population as a whole, since those who are not satisfied are more likely to have sought care elsewhere (Levin *et al.,* 2003). There is need for future researchers to revise the sampling method by conducting household survey instead of hospital exit interview.

During data analysis it was discovered that the way in which data was gathered inhibited the ability to conduct a thorough analysis of the results. There was a missing specific question (what is the influence of service quality on patient's choice of hospital?) in a study that could have helped address a dimension of service quality that influences patient's choice of hospitals. Therefore, there is a need for future researchers to revise the specific method for gathering data.

3.11 Ethical Considerations

Approval to undertake the research was sought and obtained from Maseno University Graduate School and Maseno University School of Public Health and Community Development; permission to conduct research in hospitals was obtained from National Council for Science and Technology (Appendix 9, 10, 11) and from ethics committee

of the study hospitals. Informed consent was sought from the individual participants after explaining to them the objective of the study (Appendix 1). Confidentiality was upheld throughout the study.

CHAPTER FOUR

RESULTS

4.1 Introduction

This chapter presents the findings of the study, the first section presents the characteristics of the study populations which consist of in-patients and the subsequent sections give findings as per the study objectives. These includes; Service quality dimensions that contributes to patient's satisfaction,perception of patients on public with faith-based hospitals service quality and compliance by public and faith-based hospitals to Ministry of Health quality standards.

4.1.1 Demographic Characteristics of the Respondents

A total of 384 patients were interviewed, 238 from public and 146 from faith-based hospitals. Their demographic characteristics are summarized in Table 4.1. Most of the in-patients in both public and faith-based were aged between 25-35 and 35-45 years. The majority of the patients admitted in both public and faith-based were female that formed 71.4% and 72.6%, respectively most of the respondents in public hospitals had no employment (42%) as compared to those admitted in faith-based hospitals (19.9%). Patients admitted in Public hospitals had 40.8% primary education while faith-based had 20.5% primary education. The majority of the respondents in public and faith-based (71.8% and 76%) were married. The respondents in both public and faith-based hospitals were mostly Christians, 96.6% and 93.8% respectively.

Table 4.1: Demographic Characteristics of Respondents

		Type of facility (Hospital)			
		Public		Faith based	
		Count	%	Count	%
Age	18 - 24	21	8.8	10	6.8
	25- 35	83	34.9	68	46.6
	35-45	58	24.4	42	28.8
	45- 55	39	16.4	18	12.3
	55-65	25	10.5	4	2.7
	65 and above	12	5.0	4	2.7
Total		**238**	**100.0**	**146**	**100.0**
Gender	Male	68	28.6	40	27.4
	Female	170	71.4	106	72.6
Total		**238**	**100.0**	**146**	**100.0**
What is the nature of your occupation?	Casual employment	40	16.8	24	16.4
	Permanent and pensionable	24	10.1	35	24.0
	Contract employment	13	5.5	19	13.0
	Self employed	61	25.6	39	26.7
	None	100	42.0	29	19.9
Total		**238**	**100.0**	**146**	**100.0**
What is your last completed level of education?	None	26	10.9	6	4.1
	Primary	97	40.8	30	20.5
	Secondary	84	35.3	57	39.0
	Tertiary	30	12.6	34	23.3
	University	1	.4	19	13.0
Total		**238**	**100.0**	**146**	**100.0**
What is your marital status?	Single	39	16.4	25	17.1
	Married	171	71.8	111	76.0
	Divorced	4	1.7	2	1.4
	Separated	8	3.4	3	2.1
	Widowed	6	2.5	2	1.4
	Refused	10	4.2	3	2.1
Total		**238**	**100.0**	**146**	**100.0**
Which is your religion?	Muslim	7	2.9	5	3.4
	Christian	230	96.6	137	93.8
	Hindus	0	0.0	4	2.7
	Traditional	1	.4	0	0.0
Total		**238**	**100.0**	**146**	**100.0**

4.1.2 Service Quality Dimensions that Contribute to Patient's Satisfaction

Qualitative results in Table 4.2 were mentioned by the respondents as the dimensions made patients happy and satisfied with health care service offered in faith-based and public hospitals.A total of 384 patients (146) from faith-based hospitals and (238) from Public hospitals were asked to identify attributes that make them happy or satisfied with service provided at the hospital they attended.Overall, the themes articulated as attributes used to assess satisfaction were classified to yield 20 categories and broken into infrastructure 801 (50%), process 538(33%) and outcome 276 (17%) as shown in Table 4.2. The number of categories at this stage was to work with but was an essential part of the process in understanding overall issues people think are part of the assessment of service quality in a hospital environment. In Table 4.2 Summarize the attributes that made the patients satisfied with the services offered in public and faith-based hospitals they were categorized under structure, process and outcome.

Table 4.2: Summary of Attributes that Contributes to Patient Satisfaction

		Frequency	%
Adequate meals	Infrastructure	182	11%
Clean environment		137	8%
Availability of equipment		154	10%
Drugs and services		90	6%
Physical structure maintenance		118	7%
Cost of treatment		120	7%
Total infrastructure		**801**	**50%**
Courtesy	Process	36	2%
Caring		160	10%
Efficiency		88	5%
Doctors attitude		110	7%
Waiting time		44	3%
Information provision		31	2%
Interpersonal skills		50	3%
Reliability		19	1%
Total process		**538**	**33%**
Low mortality rate	Outcome	41	3%
Low morbidity rate		66	4%
Relief of pain		43	3%
Improved mobility		59	4%
Improved symptoms		50	3%
Reduced co-infection		17	1%
Total Outcome		**276**	**17%**
Overall Total		**1615**	**100%**

A number of factors were identified as what attributes to patients satisfaction. Overall, the themes articulated as attributes used to evaluate satisfaction were categorized into structure, process and outcomes shown in Table 4.3. Respondents were free to identify as many potential categories as possible. The results shows factors that were mentioned that made patients satisfied; clean environment was mentioned 120 (7%) times in faith-based showing that many patients were satisfied with the level of cleanliness while in public hospital was only mentioned 17 (1%) times showing that many of the patients were not satisfied with the level of cleanliness though many

patients mentioned the cost of services that made them satisfied in public hospitals 80 (5%) as compared with faith-based where it was mentioned few times 40 (2%). Patients in faith-based were also satisfied with availability of equipment 98 (6%) and 89 (6%) physical maintenance as compared with patients in public hospitals as indicated. Caring was mentioned more frequently as a satisfier in faith-based hospitals 118 (7%) than in public hospitals it was only mentioned 42 (3%). Overall patients who attended to faith-based were satisfied compared to those in public hospitals. In general the most of the attributes that patients mentioned that make them happy or satisfied were from the category of infrastructure and caring from the category of process.

Table 4.3: Attributes that Makes Patients Happy/ Satisfied in Faith-Based & Public Hospitals

	Infrastructure		Process		Outcome		
	Faith-Based	Public	Faith-Based	Public	Faith-Based	Public	
Adequate meals	110(7%)	72 (4%)					182 (11%)
Clean environment	120(7%)	17 (1%)					137 (8%)
Availability of equipment	98(6%)	56 (3%)					154 (10%)
Drugs and services	66(4%)	24 (1%)					90 (6%)
Physical structure maintenance	89 (6%)	29 (2%)					118 (7%)
Cost of treatment	40 (2%)	80 (5%)					120 (7%)
Courtesy			29(2%)	7 (0%			36(2%)
Caring			118(7%)	42 (3%)			160 (10%)
Efficiency			75 (5%)	13 (1%)			88(5%)
Doctors attitude			50 (3%)	60 (4%)			110 (7%)
Waiting time			41 (3%)	3 (0%)			44(3%)
Information provision			24 (1%)	7 (0%)			31 (2%)
Interpersonal skills			5 (0%)	45 (3%)			50 (3%)
Reliability			10 (1%)	9 (1%)			19 (1%)
Low mortality rate					37 (2%)	4 (0%)	41 (3%)
Low morbidity rate					46 (3%)	20(1%)	66(4%)
Relief of pain					35 (2%)	8(0%)	43(3%)
Improved mobility					47 (3%)	12(1%)	59(4%)
Improved symptoms					36 (2%)	14(1%)	50(3%)
Reduced co-infection					10 (1%)	7 (1%)	17 (1%)
	523(32%)	27(17%)	352(22%)	186(12%)	211(13%)	65 (4%)	1615 (100%)

The themes in faith- based and public hospitals were classified and yielded 22 categories which were grouped as infrastructure with 10 categories, process had 8 categories and outcome had 4 categories. Items in Infrastructure was mentioned 519 (51%), process 394 (39%) and outcome 98 (10%) infrastructure being the major dimension that affects health service in the hospitals as shown in Table 4.4.

Table 4.4: Summary of What Affects Health Services in the Hospitals

		Frequency	%
Accessible	Infrastructure	7	1%
Insufficiency standards		34	3%
Lack of drugs		98	10%
Lack of some services		56	6%
Poor diet		44	4%
High cost		94	9%
Poor equipment		36	4%
Poor physical structure		27	3%
Shortage of staff		65	6%
Untidy environment		58	6%
Total infrastructure		**519**	**51%**
Availability of information	Process	10	1%
Interpersonal relationships		120	12%
Clear communication		41	4%
Discrimination		67	7%
Long queues		38	4%
Low standards of caring		40	4%
Negligence of the staff		63	6%
Poor medication process		15	1%
Total Process		**394**	**39%**
Co-infection	Outcome	42	4%
High mortality rate		19	2%
Increased morbidity		9	1%
Drug resistance		28	3%
Total Outcome		**98**	**10**
Overall		**1011**	**100%**

The data was then analyzed and the resultant code concurrence Table 4.5, most common areas mentioned to affect services provided in the hospitals shortage of staff (65), lack of drugs (60), untidy environment (54), interpersonal relationship (101), discrimination (62), negligence of the staff (62),long queues (38),co-infection (72) and drugs resistance were mentioned as the key areas contributing to public hospitals not to offer better health service that satisfy the patients especially infrastructure, process and outcome as indicated in Table 4.5. While in faith-based hospitals there were few (lack of some service 38, High cost of service 60 and interpersonal relationship 19) areas that the concern was raised as compared to Public hospitals as shown in the Table 4.5

Table 4.5: What Affects Health Services in Faith-Based and Public Hospitals

	Infrastructure		Process		Outcome		TOTAL
	Faith Based	Public	Faith Based	Public	Faith Based	Public	
Accessible	6 (1%)	1 (1%)					7 (1%)
Insufficiency standards	2 (0%)	32 (3%)					34 (3%)
Lack of drugs	2 (0%)	96 (9%)					98 (10%)
Lack of some services	38 (4%)	18 (2%)					56(6%)
Poor diet	11 (1%)	33 (3%)					44 (4%)
High cost	60 (6%)	34 (3%)					94 (9%)
Poor equipment		36 (4%)					36 (4%)
Poor physical structure		27 (3%)					27(3%)
Shortage of staff		65 (6%)					65(6%)
Untidy environment	4 (0%)	54 (5%)					58(6%)
Total Infrastructure	**123(12%)**	**396(39%)**					**519 (51%)**
Availability of information			1(0%)	9 (1%)			10 (1%)
Interpersonal relationships			19(2%)	101(10%)			120 (12%)
Clear communication			11(1%)	30 (3%)			41 (4%)
Discrimination			5 (0%)	62 (6%)			67 (7%)
Long queues				38 (4%)			38 (4%)
Low standards of caring			6(1%)	34 (3%)			40 (4%)
Negligence of the staff			1 (0%)	62 (6%)			63 (6%)
Poor medication process			4 (0%)	11 (1%)			15 (1%)
Total Process			**47(5%)**	**347(34%)**			**394 (39%)**
Co-infection						42(4%)	42 (4%)
High mortality rate						19(2%)	19 (2%)
Increased morbidity						9(1%)	9 (1%)
Drug resistance					1(0%)	27(3%)	28 (3%)
Total Outcome					**1(0%)**	**97(10%)**	**98 (10%)**
Overall	**123 (12%)**	**396 (39%)**	**47 (5%)**	**347 (34%)**	**1(0%)**	**97 (10%)**	**1011 (100%)**

There commendations for improving conditions of health care quality in public and faith-based hospitals were given by the respondents. The themes from recommendations for improving conditions of health care quality in a particular hospital were classified and yielded 22 categories which were grouped as infrastructure with 11 categories was recommended more 674(62%), process had 7 categories with 273 (26%) and outcome had 4 categories with 139 (12%) as shown in Table 4.6.

Table 4.6: Summary of Recommendations for Improving Health Service Quality

		Frequency	%
Add more equipment	**Infrastructure**	47	4%
Clean environment		49	4%
Improve policy standards		32	3%
Improve diet		40	4%
Introduce new services		84	8%
Maintenance of physical structure		63	6%
Purchase more drugs		49	4%
Reduce cost of services		84	8%
Improve policy standards ensuring they are adhered		32	3%
Introduce new services		84	8%
Staff capacity building		110	10%
Total Infrastructure		**674**	**62%**
Keep up	**Process**	32	3%
Clear communication		41	4%
Provision of information		23	2%
Improve efficiency		60	5%
Improve interpersonal relationship by staff training		51	4%
Justice		32	3%
Treat all patient equal		54	5%
Total process		**293**	**26%**
Reduced resistance of drugs among patients	**Outcome**	47	4%
Reduce mortality		23	2%
Reduce co-infection among patients		23	2%
Reduce morbidity		46	4%
Total Outcome		**139**	**12%**
Overall		**1106**	**100%**

The data was then analyzed and the resultant code concurrence Table 4.7, many recommendation were given that can be applied in order to improve service quality particularly in public hospitals the key recommendations were add more staff 47 (4%),staff capacity building 104 (9%) keep the environment clean 46 (4%), maintenance of physical structure 61 (6%), improve interpersonal relations 57 (5%) among many others as shown in Table 4.7 while in faith-based few reduce cost of services 62 (6%), introduce new services 40 (4%), improve diet 11(1%) among others recommendations were highlighted as patients seemed to be satisfied with health care service quality see Table 4.7.

Table 4.7: Recommendations for Improving Health Service Quality in Public and Faith-Based Hospitals

	Infrastructure		Process		Outcome		Total
	Faith Based	Public	Faith Based	Public	Faith Based	Public	
Add more equipment		47(4%)					47(4%)
Clean environment	3(0%)	46(4%)					49(4%)
Improve policy standards	2(0%)	30(3%)					32(3%)
Improve diet	11(1%)	29(3%)					40(4%)
Introduce new services	40(4%)	44(4%)					84(8%)
Maintenance of physical structure	2 (0%)	61(6%)					63(6%)
Purchase more drugs	2 (0%)	47(4%)					49(4%)
Reduce cost of services	62(6%)	22(2%)					84(10%)
Improve policy standards ensuring they are adhered	2 (0%)	30(3%)					32(3%)
Introduce new services	40(4%)	44(4%)					84(8%)
Staff capacity building	6(1%)	104(9%)					110(10%)
Total Infrastructure	**170(15%)**	**504(47%)**					**674(62%)**
Keep up			27(2%)	5(0%)			32(2%)
Clear communication			11(1%)	30(3%)			41(4%)
Provision of information			2(0%)	21(2%)			23(2%)
Improve efficiency			3(0%)	57(5%)			60(5%)
Improve interpersonal relationship by staff training			12(1%)	39(4%)			51(5%)
Justice			7(1%)	25(2%)			32(3%)
Treat all patient equal			3(0%)	51(5%)			54(5%)
Total Process			**65(6%)**	**228(20%)**			**293(26%)**
Reduced resistance of drugs among patients						47(4%)	47(4%)
Reduce mortality						23(2%)	23(2%)
Reduce co-infection among patients						23(2%)	23(2%)
Reduce morbidity						46(4%)	46(4%)
Total Outcome						**139 (12%)**	**139(12%)**
Overall	**170(15%)**	**504(47%)**	**65(6%)**	**228(20%)**		**139(12%)**	**1106(100%)**

In the Table 4.8 the results indicates that patients' rating on service quality of care in the hospitals the responses in faith-based hospitals was 1% and in public hospitals

79% rated poor, while 4% faith-based hospitals and 13% public hospitals rated fair, 59% faith-based hospitals rated good while 8% rated the public hospitals good and 36% faith-based was rated very good and 0% public hospital rated very good. This indicates that patients who attended to faith based hospitals were much satisfied as compared to those attended to public hospitals as shown in the Table 4.8.

Table 4.8: Rating of Health Care Quality of Services Provided by Type of Facility

		Type of facility			
		Faith Based		Public	
		Count	%	Count	%
How do you rate health care services quality provided in this hospital?	Poor	1	1%	189	79%
	Fair	6	4%	31	13%
	Good	86	59%	18	8%
	Very Good	53	36%	0	0%
	Total	**146**	**100%**	**238**	**100%**

In the Figure 4.1 the results of patients' rating on service quality of care in the hospitals the responses in faith-based hospitals was rated high with good and very good while public hospitals were rated poor at 79%, see Figure 4.1

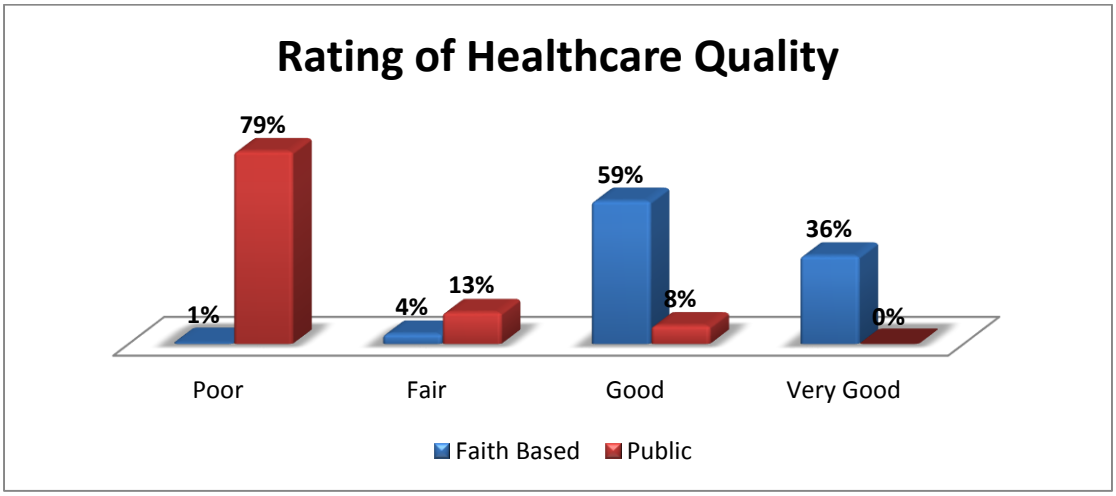


Figure 4.1: Rating of Health Care Quality of Services Provided by Type of Facility

4.2. Perception of Patients on service quality in Public Hospitals and Faith Based Hospitals.

The analysis of data on perception of patients on service quality in public and faith-based was from the data collected from 384 respondents. The major results are Reliability analysis on questionnaire 1 part C among the five SERVQUAL factors (Tangibility, Reliability, Responsiveness, Assurance and Empathy, descriptive analysis, Chi-Square and, T- test among the five SERVQUAL factors as presented in the following paragraphs,

4.2.1 Reliability Analysis

Overall reliability analysis of this study was measured by using SPSSS version 22.0. Cronbanch Alpha value is .962 for 384 respondents and five variables containing 26 scale questions, shows that data is highly reliable (0.962). However, individual variables reliability is less than overall reliability for all variables but the figures are considered acceptable outcome, which is greater than the recommended value of 0.7 (Churchil,1979). The items for each SERVQUAL factor are shown in the Table 4.9.

Table 4.9: Reliability Analysis

Dimensions	List of Items	Number of items	Cronbach Alpha
Tangibility	Physical facilities are visually appealing	8	0.865
	Cleanliness in the ward/room is high		
	Toilet facilities are clean		
	Hospital linens are clean		
	Diagnostic services are available and reliable		
	The hospital has adequate health service providers		
	The medicines are available in this hospital		
	The cost of services received in this hospital is reasonable		
Reliability	The admission procedure of this hospital is good	4	0.829
	People at the registration counter are helpful		
	Health providers gave proper medical treatment		
	You felt satisfied with the service provided		
Responsiveness	Admission procedure is fast	5	0.795
	On the whole, registration procedure is good		
	Doctor has given satisfactory time to narrate the illness		
	You do not receive prompt service from employees in this hospital		
	Food served as per suggestions of the doctor		
Assurance	You would return to this hospital	5	0.84
	Attitude of doctor is satisfactory		
	Behavior of nursing staff is good		
	You can trust employees of this hospital		
	You feel safe in your transactions with health care providers		
Empathy	Doctors give sufficient attention to the patients	4	0.853
	Staff services and level of care is good		
	The providers seemed concerned about your needs		
	You were satisfied with the completeness of the information given to you about your problem		
Overall Scale		26	0.962

Descriptive analysis of five dimensions containing 26 scale questions on perception of patients on service quality in public with faith-based. The results of the respondents in Table 4.10 reveal that overall perception of the patients on tangibility dimension was perceived with higher satisfaction physical facilities appealing 64.4%, cleanliness in

the ward 63.7%, toilet clean 58.9%, , hospital linen are clean 58.9% in faith-based hospitals as compared with public hospitals, among all factors on tangibility except the cost of services that was perceived low in both public and faith-based hospitals the satisfaction was 23.5% in public hospitals and 23.3% in faith-based hospitals. The tangibility factor that the patients perceived to be worse in public hospitals was cleanliness of the toilet that scored as low as 1.3% and hospital linens cleanliness score 44.5% strongly disagree. Generally the level of cleanliness in public hospitals was rated low among all the factors on tangibility dimension in public hospitals as shown in Table 4.10.

Table 4.10: Tangibility

Type of facility		Strongly Disagree		Disagree		Undecided		Agree		Strongly Agree		Total	
		n	%	n	%	n	%	n	%	n	%	n	%
Public	Physical facilities are visually appealing	45	18.9	63	26.5	3	1.3	91	38.2	36	15.1	238	100.0
Faith based		0	0.0	3	2.1	2	1.4	47	32.2	94	64.4	146	100.0
Public	Cleanliness in the ward/room is high	88	37.0	107	45.0	2	.8	35	14.7	6	2.5	238	100.0
Faith based		0	0.0	2	1.4	0	0.0	51	34.9	93	63.7	146	100.0
Public	Toilet facilities are clean	144	60.5	70	29.4	4	1.7	17	7.1	3	1.3	238	100.0
Faith based		0	0.0	5	3.4	0	0.0	55	37.7	86	58.9	146	100.0
Public	Hospital linens are clean	106	44.5	79	33.2	0	0.0	48	20.2	5	2.1	238	100.0
Faith based		0	0.0	9	6.2	1	.7	50	34.2	86	58.9	146	100.0
Public	Diagnostic services are available and reliable	70	29.4	64	26.9	3	1.3	89	37.4	12	5.0	238	100.0
Faith based		0	0.0	20	13.7	5	3.4	63	43.2	58	39.7	146	100.0
Public	The hospital has adequate health service providers	73	30.7	93	39.1	4	1.7	59	24.8	9	3.8	238	100.0
Faith based		0	0.0	51	34.9	5	3.4	51	34.9	39	26.7	146	100.0
Public	The medicines are available in this hospital	64	26.9	80	33.6	4	1.7	67	28.2	23	9.7	238	100.0
Faith based		2	1.4	14	9.6	1	.7	59	40.4	70	47.9	146	100.0
Public	The cost of services received in this hospital is reasonable	26	10.9	73	30.7	4	1.7	79	33.2	56	23.5	238	100.0
Faith based		36	24.7	30	20.5	5	3.4	41	28.1	34	23.3	146	100.0

From Table 4.11 on tangibility 100% of patients in public facilities interviewed disagreed whereas 80.4% of those in faith-based facilities agreed. In public 100% strongly disagreed while in faith-based 92% strongly agreed among responded interviewed.

Table 4.11 Tangibility by type of facility

			Type of facility		
			Public	Faith based	Total
Tangibility	Strongly disagree	Count	17	0	17
		% within Tangibility	100.0%	0.0%	100.0%
	Disagree	Count	121	0	121
		% within Tangibility	100.0%	0.0%	100.0%
	Undecided	Count	74	10	84
		% within Tangibility	88.1%	11.9%	100.0%
	Agree	Count	22	90	112
		% within Tangibility	19.6%	80.4%	100.0%
	Strongly agree	Count	4	46	50
		% within Tangibility	8.0%	92.0%	100.0%
Total		Count	238	146	384
		% within Tangibility	62.0%	38.0%	100.0%

Under null hypothesis, there is independence (no relationship) in perception of patients by type of health facility under tangibility dimension. With Pearson Chi Square value of 0.000 less than the set p value 0.05 this results being statistically significant, we reject the null hypothesis and conclude that perception among patients in the two types of facilities within tangibility dimension is dependent. Patients from faith based hospitals as from the descriptive statistics show they have positive perceptions for the tangibility dimension whereas those from the public hospitals have negative perceptions and this has been confirmed as being statistically significant with the Chi-Square analysis.

Table 4. 12 Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	255.979[a]	4	.000
Likelihood Ratio	309.907	4	.000
Linear-by-Linear Association	220.891	1	.000
N of Valid Cases	384		

Table 4.13 results reveal that overall perception of the patients on reliability dimension the patient's perceived higher satisfaction in faith-based hospitals as compared with public hospitals among all factors on reliability as shown in the Table 4.13.Though the patients perceived moderate satisfaction with admission procedure 46.2% agreed and 6.3% strongly agreed in public hospitals. Also patients rated the people at registration counter as helpful providers scoring 49.2% agreed and 6.7% strongly agreed in public hospitals indicating positive attitude faith-based respondents 66% agreed that admission procedure was good, people at registration counter 57.5% agreed and 32.2% strongly agreed that they were helpful. In public hospital 29.4% agreed and 6.3% strongly agreed that the health provider gave proper medical respective to faith- based 40.4% agreed and56.8% strongly agreed. In faith-based 53.4% agreed and 43.2% strongly agreed that they felt satisfied with the services provided. While in public hospital 25.2% strongly disagree and 45.4% disagree that they felt satisfied with the services provided.

Table 4.13: Reliability

Type of facility		Strongly disagree		Disagree		Undecided		Agree		Strongly agree		Total	
		n	%		%	n	%	n	%		%	n	%
Public	The admission procedure of this hospital is good	29	12.2	78	32.8	6	2.5	110	46.2	15	6.3	238	100.0
Faith based		0	0.0	6	4.1	5	3.4	92	63.0	43	29.5	146	100.0
Public	People at the registration counter are helpful	22	9.2	76	31.9	7	2.9	117	49.2	16	6.7	238	100.0
Faith based		0	0.0	8	5.5	7	4.8	84	57.5	47	32.2	146	100.0
Public	Health providers gave proper medical treatment	51	21.4	98	41.2	4	1.7	70	29.4	15	6.3	238	100.0
Faith based		0	0.0	3	2.1	1	.7	59	40.4	83	56.8	146	100.0
Public	You felt satisfied with the service provided	60	25.2	108	45.4	6	2.5	49	20.6	15	6.3	238	100.0
Faith based		0	0.0	5	3.4	0	0.0	78	53.4	63	43.2	146	100.0

From Table 4.14 on reliability 100% of patients in public facilities interviewed disagreed whereas 59% of those in faith-based facilities agreed. In public 100% strongly disagreed while in faith-based 86.3% strongly agreed among responded interviewed.

Table 4.14 on Reliability by type of hospital

			Type of facility		
			Public	Faith based	Total
Reliability	Strongly disagree	Count	16	0	16
		% within Reliability	100.0%	0.0%	100.0%
	Disagree	Count	56	0	56
		% within Reliability	100.0%	0.0%	100.0%
	Undecided	Count	105	5	110
		% within Reliability	95.5%	4.5%	100.0%
	Agree	Count	50	72	122
		% within Reliability	41.0%	59.0%	100.0%
	Strongly agree	Count	11	69	80
		% within Reliability	13.8%	86.3%	100.0%
Total		Count	238	146	384
		% within Reliability	62.0%	38.0%	100.0%

Under null hypothesis, there is independence (no relationship) in perception of patients by type of health facility under reliability dimension. With Pearson Chi - Square value of 0.000 less than the set p value 0.05 this results being statistically significant, we reject the null hypothesis and conclude that perception among patients in the two types of facilities within reliability dimension is dependent.

Table 4.15 Chi-Square Tests for Reliability

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	198.265[a]	4	.000
Likelihood Ratio	240.197	4	.000
Linear-by-Linear Association	169.316	1	.000

In Table 4.16 results shows that the perception of the patients on responsiveness dimension was perceived with higher satisfaction in faith- based hospitals as where compared to public hospitals among all factors on responsiveness, except the delay at admission in both public and faith-based hospitals the respondents perceived low satisfaction of 6.7% in public and 11.6% in faith-based hospitals as indicated in Table 4.16. Within the dimension of responsiveness 46.6 % agreed and 10.5% strongly agreed in public hospitals respectively 37.7% agree and 58.2 % strongly agree in faith-based that doctors gave satisfactory time to narrate the illness meaning that their perception was positive. In faith-based 33.6% agreed and 57.5% strongly agreed that they received prompt service from employee. Also respondents 40.4% agreed and56.2% strongly agreed that they were served food as per doctor's request.

Table 4.16: Responsiveness

Type of facility		Strongly disagree		Disagree		Undecided		Agree		Strongly agree		Total	
		n	%	n	%	n	%	n	%	n	%	n	%
Public	Admission procedure is fast	45	18.9	118	49.6	15	6.3	44	18.5	16	6.7	238	100.0
Faith based		20	13.7	49	33.6	14	9.6	46	31.5	17	11.6	146	100.0
Public	On the whole, registration procedure is good	57	23.9	122	51.3	6	2.5	48	20.2	5	2.1	238	100.0
Faith based		0	0.0	14	9.6	10	6.8	75	51.4	47	32.2	146	100.0
Public	Doctor has given satisfactory time to narrate the illness	33	13.9	59	24.8	10	4.2	111	46.6	25	10.5	238	100.0
Faith based		0	0.0	4	2.7	2	1.4	55	37.7	85	58.2	146	100.0
Public	You received prompt service from employees in this hospital	63	26.5	80	33.6	5	2.1	74	31.1	16	6.7	238	100.0
Faith based		0	0.0	11	7.5	2	1.4	49	33.6	84	57.5	146	100.0
Public	Food served as per suggestions of the doctor	82	34.5	94	39.5	5	2.1	50	21.0	7	2.9	238	100.0
Faith based		0	0.0	1	.7	4	2.7	59	40.4	82	56.2	146	100.0

From Table 4.17 on responsiveness 100% of patients in public facilities interviewed disagreed whereas 83.0% of those in faith-based facilities agreed. In public 100% strongly disagreed while in faith-based 90.5% strongly agreed among responded interviewed.

Table 4. 17 On Responsiveness by type of facility

			Type of facility		
			Public	Faith based	Total
Responsiveness	Strongly disagree	Count	23	0	23
		% within Responsiveness	100.0%	0.0%	100.0%
	Disagree	Count	91	0	91
		% within Responsiveness	100.0%	0.0%	100.0%
	Undecided	Count	98	10	108
		% within Responsiveness	90.7%	9.3%	100.0%
	Agree	Count	24	117	141
		% within Responsiveness	17.0%	83.0%	100.0%
	Strongly agree	Count	2	19	21
		% within Responsiveness	9.5%	90.5%	100.0%
Total		Count	238	146	384
		% within Responsiveness	62.0%	38.0%	100.0%

Under null hypothesis, there is independence (no relationship) in perception of patients by type of health facility under responsiveness dimension. With Pearson Chi - Square value of 0.000 less than the set p value 0.05 this results being statistically significant, we reject the null hypothesis and conclude that perception among patients in the two types of facilities within responsiveness dimension is dependent.

Table 4.18 Chi-Square Tests for Responsiveness

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	253.304[a]	4	.000
Likelihood Ratio	301.581	4	.000
Linear-by-Linear Association	198.846	1	.000
N of Valid Cases	384		

The descriptive results of the respondents in Table 4.19 revealed that perception of the patients on assurance dimension was perceived with higher satisfaction in faith-based hospitals where 32.2% agreed and 48.6% strongly agreed that behaviour of nursing staff is good respectively to public hospitals 26.1% agreed and 3.4% strongly agreed. It is on the attitude of doctors that in both public and faith-based hospitals the respondents perceived high satisfaction that 48.3% strongly agreed and 25.2% agreed in public and 74.7% strongly agreed and 23.3% agreed in faith-based hospitals that the attitude of doctors was satisfactory as shown in the Table 4.19. In public hospital 32.8% agreed and 2.5% strongly agreed respectively to faith-based 43.8% and 50 % strongly agreed that they could trust employees of the hospital. While 32.8% agreed and 8.0% strongly agreed in public, and 58.2% agreed and 37.0% strongly agreed that they felt safe in transactions with health care providers. Only 23.1% agreed and 9.2% strongly agreed in public hospitals that they would return to the hospital for treatment. Whereas 52.7% agreed and 37.7% strongly agreed in faith-based hospitals that they would return to hospital for treatment.

Table 4.19: Assurance

Type of facility		Strongly disagree		Disagree		Undecided		Agree		Strongly agree		Total	
		n	%	n	%	n	%	n	%	n	%	n	%
Public	Attitude of doctor is satisfactory	28	11.8	30	12.6	5	2.1	60	25.2	115	48.3	238	100.0
Faith based		0	0.0	2	1.4	1	.7	34	23.3	109	74.7	146	100.0
Public	Behavior of nursing staff is good	63	26.5	102	42.9	3	1.3	62	26.1	8	3.4	238	100.0
Faith based		0	0.0	27	18.5	1	.7	47	32.2	71	48.6	146	100.0
Public	You can trust employees of this hospital	61	25.6	90	37.8	3	1.3	78	32.8	6	2.5	238	100.0
Faith based		0	0.0	5	3.4	4	2.7	64	43.8	73	50.0	146	100.0
Public	You feel safe in your transactions with health care providers	34	14.3	103	43.3	4	1.7	78	32.8	19	8.0	238	100.0
Faith based		0	0.0	7	4.8	0	0.0	85	58.2	54	37.0	146	100.0
Public	You would return to this hospital for treatment	65	27.3	90	37.8	6	2.5	55	23.1	22	9.2	238	100.0
Faith based		4	2.7	9	6.2	1	.7	77	52.7	55	37.7	146	100.0

From Table 4.20 on assurance 100% of patients in public facilities interviewed disagreed whereas 64.2% of those in faith-based facilities agreed. In public 100% strongly disagreed while in faith-based 89.7% strongly agreed among responded interviewed

Table 4. 20 Assurance by type of facility

			Type of facility		
			Public	Faith based	Total
Assurance	Strongly disagree	Count	16	0	16
		% within Assurance	100.0%	0.0%	100.0%
	Disagree	Count	77	0	77
		% within Assurance	100.0%	0.0%	100.0%
	Undecided	Count	95	8	103
		% within Assurance	92.2%	7.8%	100.0%
	Agree	Count	43	77	120
		% within Assurance	35.8%	64.2%	100.0%
	Strongly agree	Count	7	61	68
		% within Assurance	10.3%	89.7%	100.0%
Total		Count	238	146	384
		% within Assurance	62.0%	38.0%	100.0%

Under null hypothesis, there is independence (no relationship) in perception of patients by type of health facility under assurance dimension. With Pearson Chi - Square value of 0.000 less than the set p value 0.05 this results being statistically significant, we reject the null hypothesis and conclude that perception among patients in the two types of facilities within assurance dimension is dependent.

Table 4.21Chi-Square Tests for Assurance

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	208.953[a]	4	.000
Likelihood Ratio	252.161	4	.000
Linear-by-Linear Association	181.831	1	.000
N of Valid Cases	384		

In Table 4.22 the results reveal that perception of the patients on empathy dimension the respondents in public 39.9% agreed and 8% strongly agreed while in faith-based 49.9% agreed and 51.4% strongly agreed that the doctor gave sufficient attention to patient. In public hospital 27.3% strongly disagreed and 45.8% disagree that staff services and level of care is good. Whereas 42.5% agreed and 52.1% strongly agreed that staff services and level of care is good in faith-based. In faith-based 39.7% agreed and 52.7% strongly agreed that provider seemed concerned about their needs .In public hospital 38.2% agreed and 4.2% strongly agreed and in faith-based 54.8% agreed and 26% strongly agreed that they were satisfied with the completeness of the information given about the medication. There is higher satisfaction in faith-based hospitals as compared with public hospitals among all factors on empathy as shown in the Table 4.22.

Table 4.22: Empathy

Type of facility		Strongly disagree		Disagree		Undecided		Agree		Strongly agree		Total	
		n	%	n	%	n	%	n	%	n	%	n	%
Public	Doctors give sufficient attention to the patients	22	9.2	92	38.7	10	4.2	95	39.9	19	8.0	238	100.0
Faith based		0	0.0	0	0.0	1	.7	70	47.9	75	51.4	146	100.0
Public	Staff services and level of care is good	65	27.3	109	45.8	5	2.1	51	21.4	8	3.4	238	100.0
Faith based		0	0.0	5	3.4	3	2.1	62	42.5	76	52.1	146	100.0
Public	The providers seemed concerned about your needs	69	29.0	105	44.1	7	2.9	48	20.2	9	3.8	238	100.0
Faith based		0	0.0	8	5.5	3	2.1	58	39.7	77	52.7	146	100.0
Public	You were satisfied with the completeness of the information given to you about your problem	41	17.2	85	35.7	11	4.6	91	38.2	10	4.2	238	100.0
Faith based		0	0.0	26	17.8	2	1.4	80	54.8	38	26.0	146	100.0

From Table 4.23 on empathy 100% of patients in public facilities interviewed disagreed whereas 63.0% of those in faith-based facilities agreed. In public 100% strongly disagreed while in faith-based 90.1% strongly agreed among responded interviewed.

Table 4. 23 Empathy by type of facility

			Type of facility		
			Public	Faith based	Total
Empathy	Strongly disagree	Count	17	0	17
		% within Empathy	100.0%	0.0%	100.0%
	Disagree	Count	98	0	98
		% within Empathy	100.0%	0.0%	100.0%
	Undecided	Count	75	5	80
		% within Empathy	93.8%	6.3%	100.0%
	Agree	Count	40	68	108
		% within Empathy	37.0%	63.0%	100.0%
	Strongly agree	Count	8	73	81
		% within Empathy	9.9%	90.1%	100.0%
Total		Count	238	146	384
		% within Empathy	62.0%	38.0%	100.0%

Under null hypothesis, there is independence (no relationship) in perception of patients by type of health facility under empathy dimension. With Pearson Chi - Square value of 0.000 less than the set p value 0.05 this results being statistically significant, we reject the null hypothesis and conclude that perception among patients in the two types of facilities within empathy dimension is dependent.

Table 4. 24 Chi-Square Tests on empathy

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	226.637[a]	4	.000
Likelihood Ratio	278.073	4	.000
Linear-by-Linear Association	201.377	1	.000
N of Valid Cases	384		

The results of perception of patients on service quality as shown in Table 4.25 indicates that in public hospitals the dimension of tangibility, patients perceived low satisfaction that's 7.9% strongly agree and 25. 5 % agree while in faith-based hospitals patient perceive high satisfaction with service quality on tangibility of47.9% strongly agree and 35.7% agree. On the other hand dimension of responsiveness public hospital scored 5.8% strongly agree and 27.5% agree showing that the perception of patients was low on dimension of responsiveness on service quality. Whereas, patients from faith-based hospitals perceived high satisfaction with responsiveness scoring 43.2% strongly agree and 38.9% agree. This represents Patients perceptions regarding service quality on reliability in public hospitals are not up to satisfaction that's 6.4% strongly agree and 36.3% agree respectively in the faith-based hospitals patient perceived services quality on assurance to be satisfactory with 40.4% strongly agreed and 53.6% that the dimension of assurance was perceived with higher satisfaction. Among the respondents interviewed they perceived low satisfaction with the dimension of empathy in public hospitals with rating 4.8% strongly agreed and 29.9% agree while in faith-based hospitals patients perceived higher satisfaction with the service quality dimension on empathy with rating as 49.6% strongly agree and 42.1% agree. Therefore, the results of the respondents in Table 4.25 reveal that overall perception of the patients on five dimensions of service quality they perceived higher satisfaction in faith-based hospitals as compared with public hospitals among all five dimensions.

Table 4.25: Perception of Patients on Service Quality in Public and Faith-Based Hospitals

	Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree	Total
Tangibility Public Hospitals	32.4%	33.0%	1.3%	25.5%	7.9%	100%
Tangibility Faith Based Hospitals	3.3%	11.5%	1.6%	35.7%	47.9%	100%
Responsiveness Public Hospitals	23.5%	39.7%	3.4%	27.5%	5.8%	100%
Responsiveness Faith Based Hospitals	2.7%	10.8%	4.4%	38.9%	43.2%	100%
Reliability Public Hospitals	17.0%	37.8%	2.4%	36.3%	6.4%	100%
Reliability Faith Based Hospitals	0.0%	3.8%	2.2%	53.6%	40.4%	100%
Assurance Public Hospitals	21.1%	34.9%	1.8%	28.0%	14.3%	100%
Assurance Faith Based Hospitals	0.5%	6.8%	1.0%	42.1%	49.6%	100%
Empathy Public Hospitals	20.7%	41.1%	3.5%	29.9%	4.8%	100%
Empathy Faith Based Hospitals	0.0%	6.7%	1.5%	46.2%	45.5%	100%

In the Figure 4.2 on perception of patients on service quality in public and faith-based hospitals, across all five dimensions as shown in the Figure 4.2 shows that patients are overall satisfied from the services provided by faith-based hospitals as compared with service provided by public hospitals as shown in the Figure 4.2

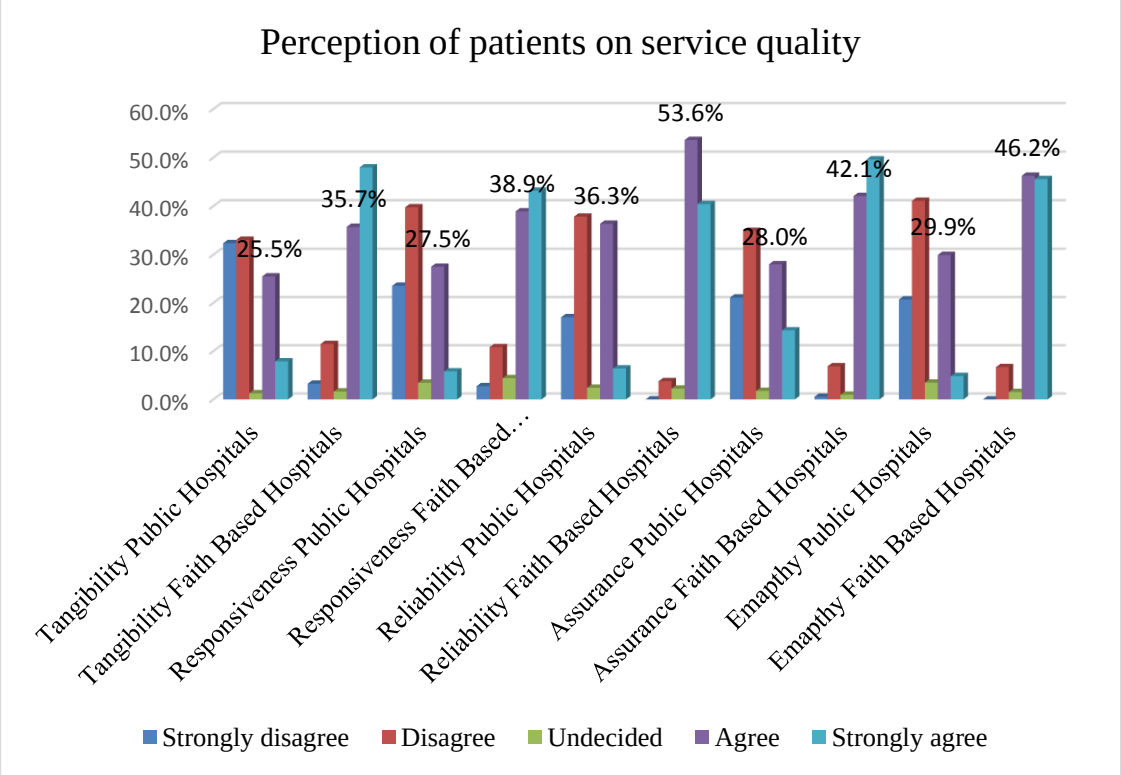


Figure 4.2: Perception of Patients on Service Quality in Public and Faith- Based Hospitals

The descriptive analysis of mean and standard deviation of the respondents in faith-based hospitals reveals that overall satisfaction of the patients (i.e.4.23 on a scale of 1 to 5, where 1 = Strongly disagree and 5 = Strongly Agree) is approximately near to 4.0 which is closer to the opinion "Agree" that shows patients on overall are satisfied with the services provided by Faith- based hospitals. Among the Individual variables, all factors have a mean greater than 4 which indicate that patients have high opinion on all the five dimensions. The standard deviation in all cases is less than 1 this shows that there is less variation in the responses while in public hospitals descriptive analysis shows that the respondents in public hospitals reveals that overall satisfaction of the patients (i.e.2.62 on a scale of 1 to 5, where 1 = Strongly disagree and 5 = Strongly agree) is approximately near to 2.0 which is closer to the opinion "Disagree" that shows patients on overall are not satisfied with the services provided by Public

hospitals. Among the Individual variables, all of them have a mean less than 3 which indicated that patients have low opinion on all the five dimensions. The standard deviation in all cases is closer to 1 that shows that there is great variation in the responses as shown in 4.26.

Table 4.26: Descriptive Statistics of Mean

Dimensions Type of facility	**N**	**Minimum**	**Maximum**	**Mean**	**Std. Deviation**
Tangibility: Faith-based hospitals	146	3	5	4.14	0.504
Public hospitals	238	1	5	2.43	0.778
Responsiveness: Faith-based hospitals	146	3	5	4.09	0.379
Public hospitals	238	1	5	2.52	0.815
Reliability : Faith-based hospitals	146	3	5	4.31	0.448
Public hospitals	238	1	5	2.77	0.909
Assurance : Faith-based hospitals	146	3	5	4.33	0.480
Public hospitals	238	1	5	2.79	0.913
Empathy : Faith-based hospitals	146	3	5	4.31	0.516
Public hospitals	238	3	5	2.57	0.760
Overall: Faith-based hospitals	146	3	5	4.23	0.347
Overall: Public hospitals	238	1	5	2.62	0.891

T test analysis for perception of patient on public and faith-based hospitals where one sample test. T test was used to test if there was a mean difference in the dimensions taking the neutral rating as the mean. The hypotheses for the dimensions were formulated as shown in Table 4.27 of One-Sample Test for Public Hospitals.

H1: The opinion of patients regarding tangibility is neutral ($\mu = 3$)

H2: The opinion of patients regarding reliability is neutral ($\mu = 3$)

H3: The opinion of patients regarding responsiveness is neutral (μ = 3)

H4: The opinion of patients regarding assurance is neutral (μ = 3)

H5: The opinion of patients regarding empathy is neutral (μ = 3).

From results in Table 4.27 all the dimensions are statistically significant at 0.05. The means of the patients have either dominated positive or negative perception about the factors within all the five dimensions. From the t value mean different at 95% confidence interval of the difference determined whether the patient agree or disagree depending on the values (positive or negative). As in the Table 4.27 faith-based hospitals had positive values whereas those from public hospitals had negative values. The results indicate that respondents from faith-based hospitals agreed with the dimensions whereas those from public hospitals disagreed.

Table 4.27: One-Sample Test for Public and Faith-based hospitals

	Test Value = 3											
	t		df		Sig. (2-tailed)		Mean Difference		95% Confidence Interval of the Difference			
									Lower		Upper	
	Public	Faith-Based	Public	Faith-Based	Public	Faith-Based	Public	Faith-Based	Public	Faith-Based	Public	Faith-Based
Tangibility	-11.209	27.26	237	145	0.000	0.000	-0.565	1.136	-0.66	1.05	-0.47	1.22
Responsiveness	-9.036	34.74	237	145	0.000	0.000	-0.477	1.089	-0.58	1.03	-0.37	1.15
Reliability	-3.853	35.24	237	145	0.000	0.000	-0.227	1.307	-0.34	1.23	-0.11	1.38
Assurance	-3.465	33.57	237	145	0.001	0.000	-0.205	1.333	-0.32	1.25	-0.09	1.41
Empathy	-7.42	30.6	237	145	0.000	0.000	-0.429	1.307	-0.54	1.22	-0.31	1.39

In the table 4.28 the summary of descriptive results shows that the mean score of public are less than 3.0 implying negative perception while the mean score in faith-based is more than 3 indicating positive perception.

Table 4.28: Summary of Descriptive Statistic of Faith-Based & Public Hospitals

Type of facility		N	Mean	Std. Deviation	Std. Error Mean
Tangibility	Public	238	2.43	.778	.050
	Faith- based	146	4.14	.504	.042
Responsiveness	Public	238	2.52	.815	.053
	Faith-based	146	4.09	.379	.031
Reliability	Public	238	2.77	.909	.059
	Faith- based	146	4.31	.448	.037
Assurance	Public	238	2.79	.913	.059
	Faith- based	146	4.33	.480	.040
Empathy	Public	238	2.57	.891	.058
	Faith- based	146	4.31	.516	.043
Overall	Public	238	2.62	.760	.049
	Faith- based	146	4.23	.347	.029

The independent-samples t-test was used to compare the means between hospital types that is public and faith-based hospitals for each dimension and an overall for all the patients. The analysis depicting that all the hypotheses are rejected and there is significant difference in the opinion of patient's perception on service quality in public and faith-based hospitals. That is the satisfaction factors differ on the basis of the hospitals type among all the five dimensions of service quality.

Table 4.29: Independent Samples Test for Public and faith-Based Hospitals

		Levene's Test for Equality of Variances		t-test for Equality of Means						
									95% Confidence Interval of the Difference	
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
Tangibility	Equal variances assumed	23.007	.000	-23.566	382	.000	-1.701	.072	-1.843	-1.559
	Equal variances not assumed			-26.008	380.870	.000	-1.701	.065	-1.830	-1.573
Responsiveness	Equal variances assumed	68.384	.000	-21.817	382	.000	-1.566	.072	-1.708	-1.425
	Equal variances not assumed			-25.501	360.291	.000	-1.566	.061	-1.687	-1.446
Reliability	Equal variances assumed	67.189	.000	-19.018	382	.000	-1.533	.081	-1.692	-1.375
	Equal variances not assumed			-22.035	367.683	.000	-1.533	.070	-1.670	-1.397
Assurance	Equal variances assumed	62.105	.000	-18.817	382	.000	-1.538	.082	-1.699	-1.377
	Equal variances not assumed			-21.581	374.412	.000	-1.538	.071	-1.678	-1.398
Empathy	Equal variances assumed	41.442	.000	-21.422	382	.000	-1.735	.081	-1.894	-1.576
	Equal variances not assumed			-24.157	380.891	.000	-1.735	.072	-1.876	-1.594
Overall	Equal variances assumed	65.183	.000	-24.168	382	.000	-1.615	.067	-1.746	-1.483
	Equal variances not assumed			-28.320	357.966	.000	-1.615	.057	-1.727	-1.503

4.3. Compliance to Ministry of Health quality standards by public and faith-based hospitals.

In the Table 4.30 shows the results of the assessment of facility as per the type of facility, 2 represent 2 facilities and 1 represented 1 facility for example if two hospitals had yes then they score 4% but only 1 hospital had yes it score 2%. The results shows that public hospitals scored 68% and faith-based hospitals scored 94% meaning that 68% and 94% things assessed were available as shown in Table 4.30.

Table 4.30: Facility Assessment Score

	Type of facility							
	Public				Faith Based			
	No		Yes		No		Yes	
	Count	%	Count	%	Count	%	Count	%
Is there sign boards showing direction and clearly displayed?	0	0.0	2	4.0	0	0.0	2	4.0
Is the compound well managed? (cut grass)	2	4.0	0	0.0	0	0.0	2	4.0
Is laundry properly managed?	2	4.0	0	0.0	0	0.0	2	4.0
Is the health facility licensed?	0	0.0	2	4.0	0	0.0	2	4.0
Does the hospital have well managed mortuary?	0	0.0	2	4.0	0	0.0	2	4.0
Is the hygienic in the kitchen maintained and food guideline available?	0	0.0	2	4.0	0	0.0	2	4.0
Is there safe water in the facility and available at all times?	2	4.0	0	0.0	0	0.0	2	4.0
Are there patients and staff toilets/latrines that are clean?	2	4.0	0	0.0	0	0.0	2	4.0
Does the health facility have functioning placenta pit?	0	0.0	2	4.0	0	0.0	2	4.0
Is there functioning incinerator in the facility?	0	0.0	2	4.0	0	0.0	2	4.0
Is there functioning drainage system for sewage and rain water?	1	2.0	1	2.0	0	0.0	2	4.0
Does the health facility regular and reliable power supply and sufficient?	0	0.0	2	4.0	0	0.0	2	4.0
Is there adequate ventilation and lighting in the rooms?	0	0.0	2	4.0	0	0.0	2	4.0
Is the facility fenced to provide the security for the facility and clients?	0	0.0	2	4.0	0	0.0	2	4.0
Is the compound free from harmful insects/ pest or vector	1	2.0	1	2.0	0	0.0	2	4.0
Are the floors and walls well maintained? (No cracks)	0	0.0	2	4.0	0	0.0	2	4.0
Are the roofs and windows well maintained? (No leakage)	0	0.0	2	4.0	0	0.0	2	4.0
Are there standards and procedures available in each department?	0	0.0	2	4.0	0	0.0	2	4.0
Are there health education materials for prevention and control of disease displayed?	0	0.0	2	4.0	1	2.0	1	2.0
Are there health education materials displays in health facility?	0	0.0	2	4.0	1	2.0	1	2.0
Are the in-patient uniforms available and inacceptable conditions?	2	4.0	0	0.0	0	0.0	2	4.0
Is there linen for beds available and n acceptable conditions?	2	4.0	0	0.0	0	0.0	2	4.0
Does in-patient receives regular meals of acceptable balanced diet?	2	4.0	0	0.0	1	2.0	1	2.0
Are there recommended protocol and proper information system like, Patient records	0	0.0	2	4.0	0	0.0	2	4.0
Does the hospital have mission statements and service standards which inform workers and service users about expected standards?	0	0.0	2	4.0	0	0.0	2	4.0
Total	16	32.0	34	68.0	3	6.0	47	94.0

In the Figure 4.3 shows the results of facility assessment on 25 items. To comply with ministry of health quality standards the hospital of level four is to have these basic items. The assessment checklist score indicates that faith-based hospitals obtained 94% while public hospitals scored 68%.

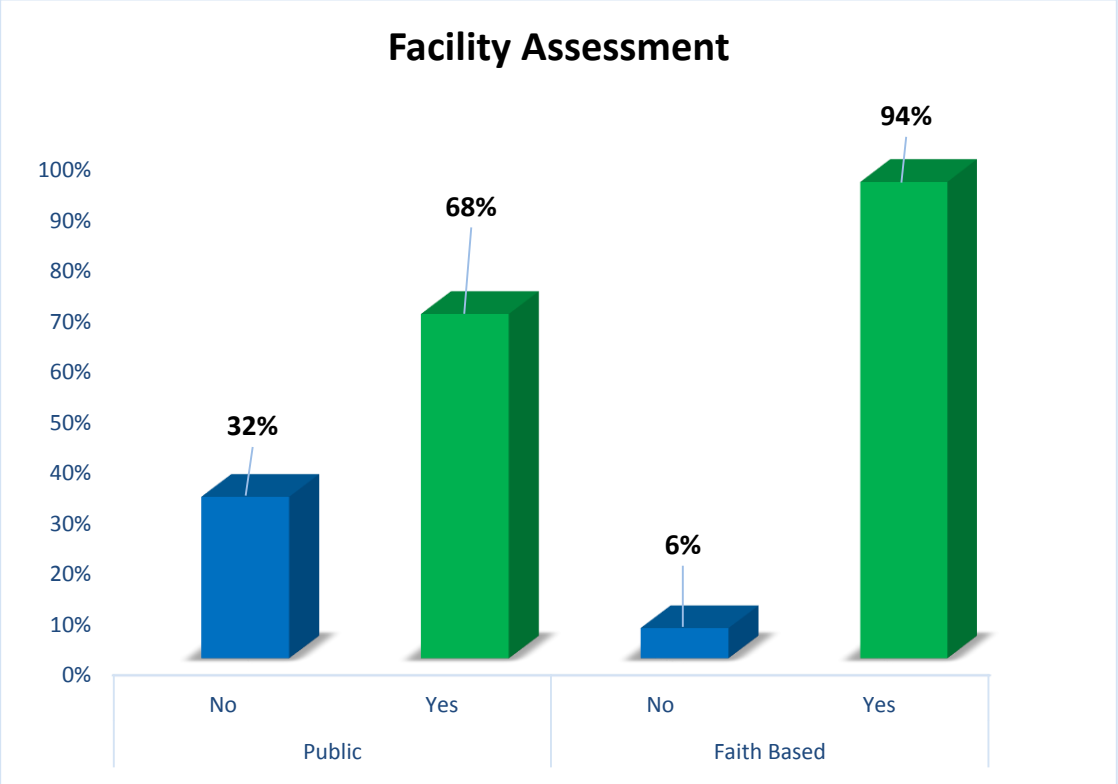


Figure 4.3: Facility Assessment Score

In the Table 4.31,10 basic used diagnostic equipment in level four hospitals were assessed, and the results shows 90% of the equipment assessed were available, functioning and in use, public hospitals while in faith-based all assessed equipment were available, functioning and in use scoring 100%. The results shows that both public and faith-based hospitals had most of the basic diagnostic equipment and were functioning and in use.

Table 4.31: Diagnostic Equipment Assessment Score

		Type of hospital			
		Public (2)		Faith-based (2)	
		Count	%	Count	%
X- ray available	Yes	2	10	2	10
Weighing scale available	Yes	2	10	2	10
Sanction machine available	Yes	2	10	2	10
Oxygen concentrator available	Yes	0	0	2	10
Centrifuge available	Yes	2	10	2	10
Autoclaves available	Yes	2	10	2	10
Refrigerator available	Yes	2	10	2	10
Screen /examination coaches available	Yes	2	10	2	10
Hematology analyzer available	Yes	2	10	2	10
Microscope available	Yes	2	10	2	10
Total		18	90	20	100

In the Figure 4.4 results shows that among the basic diagnostic equipment assessed 90% were available in public hospitals and 100% in faith-based hospitals.

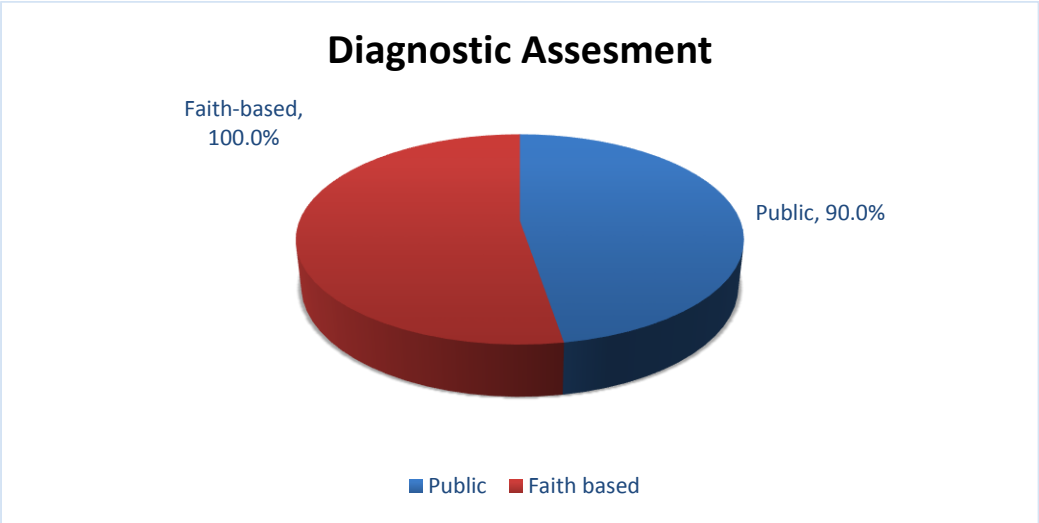


Figure: 4.4: Diagnostic Equipment Assessment Score

CHAPTER FIVE

DISCUSSION

5.1 Introduction

This chapter discusses the study findings in details as per the objective and makes the necessary comparisons with similar studies conducted elsewhere on the evaluation of service quality health care.

5.1.1 Service Quality Dimensions that Contributes to Patient's Satisfaction

The results from qualitative data shows that among the factors on infrastructure those patients mentioned that made them satisfied/ happy with the services they received shows that patients from faith-based hospitals were more satisfied with several attributes on infrastructure; for example many patients in faith-based were happy with the cleanliness of the hospital environment, adequate meal and proper maintenance of physical structure than public hospitals. While many patients were not satisfied with level of cleanliness, inadequate meal, maintenance of physical structure in public hospitals this supports Ashrafun and Uddin (2011) findings on in-patient satisfaction in public hospitals. The results revealed that toilet, bathroom, wards and linen condition, quality of food, were most influential factors contributing to patient dissatisfaction in public hospitals in Bangladesh. This finding also supports Boshoff and Gray, (2004) who indicated that customer satisfaction dimensions includes satisfaction with meals, satisfaction with the nursing staff and satisfaction with cost and cleanliness of the facility. The finding of the current study is in line with finding of Adeyi and Marrow (2006) in Nigeria noted that health equipment and physical structure were not maintained, close to one third of the equipment in series of public health care institutions were not being used, as compared to faith inspired institutions

where the equipment were well maintained and physical structure. Many patients in public hospitals complained of the infrastructure aspects.

Many patients from public hospitals said that cost of service made them happy in public hospitals as compared to faith-based hospitals, though many patients appreciated the availability of medicine in faith-based where few patients mentioned cost of service to have contributed to their satisfaction while in the hospital this results is in agreement with Mliga (2003) in Tanzania who found that technical measures and medicine stocks, were available in faith-based than public, patients were much satisfied. Though clients valued the service provided by public facilities relative to the cost of those services Mliga (2003). The finding of the current study compare with those reputed by indicating Szyca *et al.* (2012) that the factors pertaining to costs and personnel competence, had influence on patient satisfaction.

The attributes that were mentioned several in the process categories were caring, courtesy, interpersonal relationship, waiting time and efficiency in faith-based than in public hospitals this supports Andeleeb (2001) whose research revealed that the personal needs of a patient, in terms of time sensitivity, specialized care, preventive advice, or just plain empathy, all influence patients' satisfaction. The finding that patient waiting time was one of the attribute that made patients happy in faith-based, this findings agree with Bratton's (2007) respondents counted lack of respect just as highly as long waiting times, as reasons for not choosing public facility and preferring to faith-based.

Lievens *et al.* (2011) conducted a study and noted that when she moved from a faith-based facility to a public facility the staff there were less respectful this supports the finding that respect and providers' interpersonal relationship makes patients happy

with health service provided. The findings of Lievens *et al.* (2011) agree with Otani and Kurz (2004) who believe behavior of doctors, nurses and hospital staff, patients‟ education, interactions of doctors and staff, moral support is more influential factors to judge patients satisfaction that was observed in faith-based facility than pubic facility. The finding of Makinen *et al.* (2011) in Ghana found that there was no difference between provider types in relation to patient satisfaction (there was a generally high level of satisfaction seen everywhere), consumers noted "more courteous services is a distinguishing feature of (faith-based facility in Ghana) providers." A similar result was obtained in Ghana by Shojo *et al.* (2012) which contradicts the current study results. Muhandwa *et al.* (2008) in a study on Patient Satisfaction at the Muhimbili National Hospital (Public hospital) in Dar es Salaam, found that patients expressed dissatisfaction with the attitudes and behaviors of health personnel, including doctors and long waiting times. The current study shows similar findings and indicates that patients are dissatisfied with the attitude and behavior of health personnel in public hospitals.

The finding of this study shows that attribute of information provision on medication does not have a major influence on patient's satisfaction which agree with Tonio *et al*, (2011) findings that show the items reflecting information receiving about the undergoing treatment does not have a major influence on patient satisfaction. Though these findings disagree with Curry and Sinclair (2002) shows that improving patient satisfaction by enhancing communication with patients and increasing their access to information relating to their condition influence patients satisfaction and its treatment.

Regarding outcome patients mentioned several items that made them satisfied, for example; reduced co-infections and morbidity in the wards in faith-based hospitals.

The study results also indicate that patients were happy with perceived low mortality rate, reduced infections especial in faith-based hospital as compared to public hospitals. This finding agrees with Hibbard *et al.* (2005) argued that if a hospital has high mortality, increased infection among admitted patients or no improvement in symptoms or mobility can lead to reduction in utilization of health service and patient satisfaction. The finding of this study also shows that patients were happy with hospitals treatment that enabled patients in pain to be relieved especially in faith-based where the drugs were available for relieving pain.

5.2 Perception of Patients on Service Quality in Public and Faith-Based Hospitals

Overall perception of the patients on tangibility dimension was perceived with higher satisfaction in faith- based hospitals as compared with public hospitals, where they rated the level of cleanliness, lack of drugs, equipment and inadequate staff to be the worse among all the factors on tangibility, rating it very low in public hospitals while faith-based scoring high among all the factors on tangibility this findings support Odaga (2004) who found that problem with public facilities was unavailability of drugs, equipment, inadequate staff and low level of cleanliness. Also patients perceived physical facility to be low in public hospitals rating it with highest score of 15.1% while faith based scored 64.4%. This agrees with Mwabu *et al*. (2004) who conducted a study in Tanzania and found that public owned hospital buildings were rated as the worst when compared with those owned by religious organisation and individuals.

Overall perception shows that patients are satisfied with the tangibility dimension in Faith Based hospitals as the mean score 4.14 while public hospital is 2.43 thus giving a results of T test -11.209 for public hospitals and 27.258 faith based hospitals showing positive perception with faith-based hospitals and negative perception with public hospitals. This finding is in line with Nwabueze *et al.* (2010) who found that rating of patient's satisfaction with hospital structure and physical environment were perceived higher in faith- based facility as compared with public hospitals in Nigeria where they perceived negatively. The findings supportWorld Bank (2005) report in Bangladesh that shows public providers were ranked lower than faith-based providers on scale-based surveys in which patients assessed cleanliness of facilities, capacity building, and the availability of certain medical inputs.

This study finding shows that among all the factors on reliability patients perceived with higher satisfaction in faith based scoring mean of 4.31 and t value (35.741) this proposes that all the values are greater than 3.0, hence the opinion are positive showing positive perception across all reliability factors. Public hospital scoring mean of 2.77 proposes that all the values are less than 3.0, hence the perceptions are negative (t value,-3.853) showing negative perception on service quality pertaining reliability dimension. This supports the Rakodi (1996) findings that public health facilities are perceived to be slow and have staff that are less committed to patients while in private of faith inspired the results shows that the providers are committed in rendering service. Also this finding is in line with a study by Babikako *et al.* (2011) which concluded that the observed differences in satisfaction healthcare delivery, and that this might be a result of the faith-based care being more 'patient-centered' than in public health facilities. On the other hand Chengsorn *et al*. (2009) reputed that public

hospitals health care delivery was associated with higher rates of treatment success for tuberculosis and HIV which contradicts the findings of this study on reliability.

The findings of this study shows that perception of the patients on responsiveness dimension was perceived with higher satisfaction in faith-based hospitals as compared with public hospitals among all factors on responsiveness, where the patients from the public set up commended that they did not receive prompt service, doctors did not give satisfactory time to narrate the illness, long waiting time, delay in admission where the highest score on dimension of responsiveness was 5.8% while faith-based was 43.2%. Public hospitals had mean of 2.52 (t value -9.036) indicating negative opinion and faith-based had mean of 4.09 (t value of 34.741) showing positive perception of service quality on responsiveness.

These results support Babikako *et al.* (2011) who carried out a cross-sectional evaluation study in public and faith- based hospitals in Kampala Uganda and found that public hospitals experienced significantly lower levels of satisfaction with responsiveness to patient preferences as compared to faith-based hospitals. The finding also agrees with another study in Uganda by Lindelow *et al.* (2003) which showed that satisfaction was higher in faith-inspired hospital than in public facilities in areas such as friendly service, information about ailment, prompt attention, and information about charges. These findings are also supported by Nwabueze *et al.* (2010) in Nigeria rated patient satisfaction on waiting time, confidentiality and doctor's consultation time was higher in the faith- based facility.

The dimension of assurance public hospitals received lowest perception among all the factors, except the attitude of doctors which scored the highest of 48.3%, and faith-based scored 74.7%. A study conducted by Muhammed and Mohammed (2015) in

Bangladesh on patients' satisfaction which found that patient's perceived quality of doctors in public hospital was good. The results also show that in public hospitals patients were not satisfied with the service provided, they could not trust employees in the hospitals, behavior of nursing staff was not good since most of the nurses had negative attitude, and interpersonal relationship was not pleasing. Therefore the patients rated the dimension of assurance in public hospitals highest score 5.8% (strongly agree) while faith-based 47.9% (strongly agree) this result supports study done by World Bank (2005) in Bangladesh shows that public providers were ranked lower than faith-based providers on scale-based surveys in which patients assessed the diagnostic explanation given them and courtesy of staff.

Among all the factors on assurance dimension patients perceived with higher satisfaction in faith based scoring mean of 4.33(t value 3.465) showing positive perception across all assurance factors. Public hospital scoring mean of2.79 (t value -3.853) (all the values are less than 3.0) hence the perception are negative on service quality pertaining assurance dimension. These results agree with Mwabu *et al*. (2004) who compared patients' perception of public and faith based hospital service quality across different dimensions and found that patients prefer faith- based health facilities to public ones. The main reasons were staff are generally slow in the process of care in public health facilities and poor attitude of staff toward patients. The current study findings are in line with Shojo *et al.* (2012) who performed a survey in Ghana on satisfaction, comparing public facilities and faith-based the findings of qualitative data suggested better satisfaction with faith-inspired providers, mostly due to availability of services and relationships between clinic staff and patients. The study done by Nwabueze *et al.* (2010) in Nigeria found that more patients complained of a negative attitude of staff at the faith-based facility which contradicts the finding of

this study showing that patients perceived positive attitude of health providers in faith-based hospitals and negative attitude in public hospitals.

The results of this study reveal that overall perception of the patients on empathy dimension was perceived to be higher satisfaction in faith- based hospitals than in public hospitals. The public hospitals scored lowest on perception of empathy as compared to faith-based, where public hospitals scored highest 4.8% , mean of 2.57 and t value of -7.420) while faith-based 45.5 % , mean was 4.23 and t value 30.598. The patients in public said the doctors did not give sufficiency attention, staff services and level of care was poor, the providers were not concerned about their needs and the patients were not satisfied with the completeness of the information given about their problem. This finding supports Lindelow *et al.* (2003) who conducted a baseline survey in Uganda indicated that satisfaction was found to be higher in private hospital than in public facilities in areas such as friendly service, information about ailment, prompt attention, and information about charges.

The overall results of five dimensions of service quality shows that patients were satisfied with service quality in faith-based scoring mean of 4.23 this proposes that all the values are greater than 3.0, hence the opinion are positive showing positive across all the five dimensions (Tangibility, Responsiveness, Reliability, Assurance and Empathy).This finding agrees with client satisfaction survey conducted in Nairobi, Kenya by MOMS & MOPHS (2009) which reputed that patients who used FBO facilities had higher levels of satisfaction (80.8 %) than patients using public facilities. However Widmer *et al.* (2011) noted that health service provided by FBOs were similar to those offered by public, the quality of care received and the satisfaction were reported to be better in both public and faith-based hospitals.

The patients in public hospitals overall perceptions on five dimensions was negative. Public hospitals scored mean of 2.62 proposes that all the values are less than 3.0, hence the opinion are negative (disagree or strongly disagree) showing negative perception on service quality pertaining five dimensions of service quality meaning that patients were dissatisfied with service quality (Tangibility, Responsiveness, Reliability, Assurance and Empathy) in public hospitals. The faith-based hospitals received the highest satisfaction ratings across all the SERVQUAL quality of service dimensions.

5. 3 Compliance to Ministry of Health Quality Standards by Public and Faith-Based Hospitals

The results of this study indicates that faith- based hospitals had higher compliance to Ministry of health quality standards as compared to public hospitals among the two (Facility assessment checklist and Basic diagnostic checklist) lists used to assess the compliance of public and faith-based hospitals. It is only the list of basic diagnostic equipment that faith-based scored 100% and public hospitals (90%) meaning that most of the basic equipment assessed were available.

The results of the assessment of facility as per the types of hospitals, basic used diagnostic equipment in level four hospitals were assessed, and the results shows that 90% of the diagnostic equipment assessed were available in public hospitals while in faith-based all assessed diagnostic equipment were available scoring 100%. The results show that both public and faith-based hospitals had most of the basic diagnostic equipment and were functioning and in use but not all equipment were available in public hospitals, this findings supports a study carried out in Kiambu county hospital by Ngugi (2002), who found that some equipment for care of the

newborn and an adult weighing machine were lacking. The quality of care did not meet the expected standards.Results of the assessment of facility as per the type of hospitals the results shows that public hospitals scored 68% and faith-based hospitals scored 94% meaning that 68% and 94% of the things assessed were available and showing the compliance in faith-based hospitals was higher as compared to public hospitals.From the results of assessment faith-based hospitals scored the highest as compared to public hospitals which supports the finding of Ngugi (2002) study carried out in Kiambu hospital public that the quality of care did not meet the expected standards.

CHAPTER SIX

CONCLUSIONS AND RECOMMENDATIONS

6.1 Conclusions

From the findings the study revealed that major dimensions of patient's satisfaction in faith-based were cleanliness of the environment, availability of equipment, maintenance of physical structure, adequate meals, availability of drugs and services, caring, courtesy, efficiency, doctors attitude and low mortality and morbidity rate while in public hospitals major dimensions of patient's satisfaction were very few as compared to faith-based they included; cost of services, adequate meals, doctors attitude and interpersonal skills.

The study revealed that faith-based hospitals patients had higher satisfaction perception on services quality as compared to public hospitals. Therefore, the study revealed that there is difference in patient perception of service quality between faith-based and public hospitals. The current study has provided evidence that patients in public hospitals are found dissatisfied with health service provided.

The study revealed that there was high compliance to Ministry of Health Quality Standards in faith-based hospitals and low in public hospitals.

6.2 Recommendations

1. The management of public hospitals should pay attention to Physical facilities and provider's behavior provided to the patients mainly the cleanness and interpersonal relationship treat patients with high emotion and kindness, and improve tangible assets of the hospitals.

2. Overall, Patients in public hospitals are dissatisfied. In this connection, hospital management must pay attention towards variables taken by SERVQUAL Model.
3. Ministry of health quality standards should be strengthened by hospitals management authorities to ensure that, they are adhered to by all employees in both public and faith-based hospitals.

6.3 Recommendations for Further Studies

1. A comparative study may be conducted between public and private hospitals.
2. Public hospitals may conduct gap analysis research by taking both sides of SERVEQUAL (Expectation & Perception) to bridge the gap between functional and technical facilities provided to the patients.
3. A study may be conducted to explore Hospital personnel's opinion on service quality regarding the improvement of services which may open new areas of exploration in public hospitals.

REFERENCES

Adeyi, O. & Marrow, R. (2006). Essential health care, Assessment and determinant of quality, *social science and medicine*, 45: 1631- 1639. World Bank.

African Health Assets Programme (ARHAP). (2006). "Appreciating assets: The Contribution of Religion to Universal Access in Africa." Cape Town: *African Religious Health Assets Programme.*

Agresti, A. & Finlay, B. (2009). Statistical Methods for the Social Sciences. Fourth edition. New Jersey: *Pearson Education*, Inc.

AHRQ. (2002). Improving Health Care Quality, Rockvile MD, *Fact Sheet*, USA.

Akhtar, S., Rozi, S, White, F. & Hasan, R. (2011). Cohort analysis of directly observed treatment outcomes for tuberculosis patients in urban Pakistan .*International Journal Tuberculosis Lung* Dis. **15**:90–96.

Akoijam, B. S., Konjengbam, K., Biswalatha, R. & Singh, T. A. (2007). "Patient's Satisfaction with Hospital Care in a Referral Institutes in Manipal", *Indian Journal of Public Health*, **51** (4): 18-25.

Aleksandra, Z., Michael, M. & David, R. (2012). "Patient Satisfaction, Prescription Drug Abuse, and Potential Unintended Consequences", *Journal of American Medical Association*, **307** (13): 112-117.

Alexandris, K., Dimitriadis, N. & Markata, D. (2002). Can perceptions of service quality predict behavioral intentions? An exploratory study in hotel sector in Greece", *Managing Service Quality*, **12** (4) 224-31.

Algılanan, D., L. & Connor, R., (2003). Attitudes to Service Quality: The Expectation Gap. *Nutrition and Food Science*, **33**: 165-173.

Allianz worldwide Care. (2014). Healthcare in Kenya.

Andaleeb, S. (2000). Public and private hospitals in Bangladesh: service quality and predictors of hospital choice. *Health policy and planning*, **15** (1):95-102. Oxford University Press, USA.

Andaleeb, S. (2001). "Service quality perceptions and patient satisfaction: a study of hospitals in a developing country", *Social Science & Medicine*, **52**: 1359-70.

Andaleeb, S. S., Siddiqui, N. & Khandakar, S. (2007). 'Patient satisfaction and quality of hospital services in Bangladesh, *Health Policy and Planning*, **22**: 263.

Andrabi, A., Hamid, S. & Jabeen, F. (2012). "Measuring Patient Satisfaction: A Cross Sectional Study to Improve Quality of Care at a Tertiary Care Hospital", *Health Line*, **3** (1): 120-125.

Argote, L. (2000). Organizational learning: Creating, Retaining, and Transferring Knowledge. New York: *Springer.*

Ashrafun, L. & Uddin, M.J. (2011) 'Factors determining inpatient satisfaction with hospital care in Bangladesh', *Asian Social Science*, **7** (6): 15-19.

Babikako, H. M., Neuhauser, D., Katamba, A. & Mupere, E. (2011). "Patient Satisfaction, Feasibility and Reliability of Satisfaction Questionnaire among Patients with Pulmonary Tuberculosis in Urban Uganda: A Cross-sectional Study." *Health Research Policy and Systems* **9** (6):1-11.

Bahrampour, A. & Zolala, F. (2005). Patient satisfaction and related factors in Kerman hospital, *Eastern Mediterranean Health Journal*, **11**: 5 - 6 Kerman University of Medical Science, Iran.

Baker, R. & Streatfield, J. (1995). "What type of general practice do patients prefer? Exploration of practice characteristics influencing patient satisfaction", *British Journal of General Practice,* **45**: 654-9.

Bazant, S. & Koenig, A. (2009). "Women's Satisfaction with Delivery Care in Nairobi's Informal Settlements." *International Journal for Quality in Healthcare* **21** (2):79-86.

Beatty, E., Morris, M., James, C., Kirsty, E, & Jungki L. (1996). Customer-Sales Associate Retail Relationships. *Journal of Retailing*, **72** (3): 223-247.

Bennett, R. & Barkensjo, A. (2005). Relationship quality, relationship marketing, and client perceptions of the levels of service quality of charitable organizations. *International Journal of Service Industry Management*, **16** (1): 81-106.

Bensing, M., Verhaak, K., Dulmen, M. & Visser, P. (2000). "Communication: the royal pathway to patient-centered medicine (editorial)", Patient Education and Counselling, **39**: 1-3.

Berendes, S., Heywood, P., Oliver, S. & Garner, P. (2011). "Quality of Private and Public Ambulatory Healthcare in Low and Middle Income Countries: Systematic Review of Comparative Studies." *PLoS Med* **8** (4): 34-38.

Berry, L., Zeithaml, A. & Parasuraman, A. (1985). "Quality counts in services, too", *Business Horizons, paper*. 44-52.

Beryl, S., Boak, A., Orla, D., Haws H., Herne, D., Mason, L., Moonie, N. & Webb, D. (2002). *Health studies*. Heinemann educational publisher, UK.

Betalden, P. & David, H. (2007). Academic dissertation, Faculty of medicine, University of Helsinki, Finland.

Bhatia, J. & Cleland, J. (2004). Health care of female outpatients in south-central India: comparing public and private sector provision. *Health Policy Plan*, **19**:402–409.

Bisson, G. P., Frank, I., Gross, R. & Strom, J.B. (2006). Out-of-pocket costs of HAART limit HIV treatment responses in Botswana's private sector. *AIDS*. **20**:1333–1336.

Boerma, T. & Carla, A. (2005). Health Information Systems: The Foundations of Public Health. *Bulletin of the World Health Organization*, **83**: 578-583.

Bojanic, D. C. (1991). Quality Measurement in Professional Services Firms. *Journal of Professional Services Marketing*, **7** (2): 27-36.

Bolormaa, T. (2007). Mongolia: Health system review. *Health Systems in Transition* **9** (4): 1–151.

Bolton, R. N., & Drew, J. H. (1991). A longitudinal analysis of the impact of service changes on customer attitudes. *The Journal of Marketing*, **1:** 9 - 14.

Bopp, K. D. (1990). "How Patients Evaluate the Quality of Ambulatory Medical.

Boshoff, C. & Gray, B. (2004). The relationships between service quality, customer satisfaction and buying intentions in the private hospital industry. *South African Journal of Business Management*, **35** (4):27-37.

Bowing, N. (2002). Research methods in health, investigating health and health services. **Second edition**, Open University press, United Kingdom.

Boyatzis, R. E. (1998). Transforming qualitative information: Thematic analysis and code development, Sage, *Thousand Oaks*. C.A.

Bratton, M. (2006). "Are you Being Served? Popular Satisfaction with Health and Education Services in Africa." *Afro barometer Working Paper Series*. No.**65**.

Brawley, M. (2000).The client perspective: What is quality health care service? A literature review. Kampala, Uganda: *Delivery of Improved Services for Health*.

Breman, G., Measham, A., Alleyne, G., Claeson, M. & Jamison, D. (2006). Priorities in health, *World Bank Publisher*, Washington. USA.

Brugha, R. & Zwi, A. (1998).Improving the quality of private sector delivery of public Health services, *Journal for challenges and strategies of health policy and planning* **13** (20):107-120.

Brugha, R. Pritze, S. (2003). Promoting safe motherhood through the private sector in low- and middle-income countries. *Bull World Health Organ*, **81**:616–623

Bryman, A. & Bell, E. (2007). Business research methods. **Second edition**. Oxford University press.

Brysland, A. & Curry, A. (2001). "Service improvements in public services using SERVQUAL", *Managing Service Quality*, **11** (6):389-401.

Buttle, F. (1996)."SERVQUAL: review, critique, research agenda", *European Journal of Marketing* **30** (1) 8-32.

Candy, P., Bali, R. & Dwivedi, A. (2007). Healthcare knowledge management. *Issues, Advance and successes.* The University of Calgary, United Kingdom.

Carman, J. M. (1990). Consumer Perceptions of Service Quality: An Assessment of the SERVQUAL Dimensions, *Journal of Retailing* **66** (1):33- 55.

Chengsorn, N., Bloss, E., Anekvorapong, R., Anuwatnonthakate, A., & Wattanaamornkiat, W. (2009). Tuberculosis services and treatment outcomes in private and public health care facilities in Thailand, 2004–2006. *International Journal Tuberculosis Lung Diseases*. **13**:888–894.

Choi, K. S., Lee, H., Kim, C. & Lee, S. (2005). The service quality dimensions and patient satisfaction relationships in South Korea: comparisons across gender, age and types of service. *Journal of Services Marketing*, **19** (3):140-149.

Churchill, G. A. (1979). A paradigm for Developing Better Measures of Marketing Constructs", *Journal of Marketing Research*, **19**: 64-73.

Columbia Encyclopaedia. (2004). **Sixth edition**, Columbia University Press.

Cronbach, L. J. 1951. Coefficient alpha and the internal structure of tests. *Psychometrika*, **16** (3): 297-334.

Cronin, J. J. & Taylor, S. A., (1994). SERVPERF versus SERVQUAL: reconciling performance-based and perception-minus-expectation measurement of service quality", *Journal of Marketing*, **58**:125-31.

Cronin, J.J. & Taylor, S.A. (1992). Measuring service quality: a reexamination and extension", *Journal of Marketing Research*, **56**: 491-504.

Curry, C. & Sinclair, E. (2002). "Assessing the quality of physiotherapy services using SERVQUAL", *International Journal of Health Care Quality Assurance*, **15** (5): 197-205.

Dagger, S., Jillian, S., & Lester, J. (2007). A Hierarchical Model of Health Service Quality: Scale Development and Investigation of an Integrated Model. *Journal of Service Research*, **10** (2): 123-142.

Davolo, D., Agnes, B., Stephen, N., Delta, A., Victor, A. & Bob, M. (1992). What does the public want from us? *Accra: Ministry of Health.*

Deman, S., Gemmel, P., Vlerick, P., Rijk, V. & Dierckx, R. (2002). "Patients' and personnel's perceptions of service quality and patient satisfaction in nuclear medicine", *European Journal of Nuclear Medicine and Molecular Imaging*, **29**: 1109-17.

Demirel, Y., Yoldas, M. A. & Divanoglu, S.U. (2009). The determinants of service quality satisfiers and dissatisfies. International Journal of Service. *Industrial Manage*, **6** (5) 353-71.

Donabedian, A. (1982). Explorations in quality assessment and monitoring: The criteria and standards of quality, MI: *Health Administration Press*, **2**:20-24.

Donabedian, A. (1990). The seven pillars of quality. *Arch Pathol Lab Med*.; **114**:1115–1118. [PubMed]

Duggirala, D., Rajendran, C. & Anantharaman, N. (2008). Patient perceived dimensions of total quality service in healthcare. Benchmarking: *An International Journal*, **15** (5): 560-83.

Dustin, R. (2010). Health Care Utilization in the Kenyan Health System: *Challenges and Opportunities,* Kenya, **2** (9): 1-3.

Edvardsson, B., Thomasson, B. & Ovretveit, J. (1994). Quality of Service: Making it Really Work, *McGraw-Hill International Limited, Maidenhead.*

Eleonora, K. (2009). Quality in NHS hospitals: no one knows better than patients", *Measuring Business Excellence*. **13** (1) 42-43.

Elliot, R. & Payene, C. (2005). Essential of Economic Evaluation in Healthcare. Pharmaceutical press, Great Britain. UK.Encounters: A Marketing Perspective", *Journal of Health Care Marketing*, **10** (1):6-15.

Evans, J. R. & Lindsay, W. M. (1996). The Management and Control of Quality, *Cincinnati*: West Publishing Company.

Fagnani, S. (2012). Most effective means of Recruit Employee for an Organization, *Demand Media*, USA.

Frohna, G., Frohna, A., Gahagan, S. & Anderson, M. (2001). "Tips for communicating with patients in managed care", *Seminars in Medical Practice,* **4** (2): 29-36.

Gachie, T. K. (2008). An evaluation of service quality in Kenya commercial banks. Unpublished MBA *Research Project*, University of Nairobi, Nairobi, Kenya.

Gemignani, R., & Wodon, Q. (2012). "How do Households Choose Between Health? The Comparative Nature of Faith-inspired Health Care Providers in sub- Saharan Africa, HNP Discussion Papers, *World Bank*, Washington, DC.

Ghauri, P. & Gronhaug, K. (2005). Research Methods in Business Studies: *A Practical Guide*.**Third edition**. Essex: FT/Prentice Hall.

Gibbs, G .R. (2007). Media review: Atlas.ti software to assist with qualitative analysis of data. *Journal of Mixed Method Research* **1**:103 – 104.

Gilson, L. (2005). "Editorial: Building Trust and Value in Health Systems in Low- and Middle-Income Countries." Social Science & Medicine **61**:1381-84.

Ginzberg, E. (1991). Health services Research key to health Policy, *The foundation for Health services Research.* Harvard University press Cambridge, London, England.

Green, A. (1992). Introduction to health planning in Developing Countries, Oxford Medical Publication.

Greener, S. L. (2008). Business Research Methods. *Copenhagen*: Ventus Publishing ApS.

Gronroos, C. (1984). A service quality model and its implications. *European Journal of Marketing*, **8**:36-44.

Grosh, M. **&** Glevive, P. (1998). Quality health care Measurement study, *Journal of economic perspective*, **12** (1): 187 – 196, World Bank.

Gwatkin, D, Guillot, M. & Henveline, P. (2000). The Burden of Disease Among the Global Poor. *Lancet*. **354**: 1234-1456.

Haimann, T. (2002).Supervisory management for health care organisation, **Fourth edition,** Brown publisher, *the Catholic Health Association of the United States of America.*

Ham, C. & Higginbotham, B. (1999). Information management in health services. Open University press. Buckingham, Philadelphia.

Harrington, L. & Pigman, H. (2008). Quality Measurement. In Prathibha Varkey, Medical Quality Management: *Theory and Practice* (29-40). USA: Jones and Bartlett Publishers, LLC, and American College of Medical Quality.

Hibbard, J. H., Stockard, J. &Tusler, M. (2005). Hospital performance reports: Impact on quality, market share and reputation. *Health Affairs*, **24** (4):1150-1160.

Hofmarcher, M., Oxley, H. & Rusticelli, E. (2007). Improved Health System Performance Through Better Care Coordination. *OECD Health Working Paper* No. **30.**

Hollis, C. (2006). Service quality evaluations in internal healthcare service chains. Queensland University of Technology, *Australasian Digital Thesis Program*.

Holly, H. (2012). Quality Assurance Utilization, University of Miami, USA. Hospitals." *International Journal of Health Planning and Management* **26**:2-17.

Howard, D. H. & Roy, K. (2004). Private care and public health: do vaccination and prenatal care rates differ between users of private versus public sector care in India? *Health Service Res*. **39**:2013–2026.

Hunt, S. D. (1991). Modern marketing theory, critical issues in the philosophy of marketing science, South Western publishing Co, Ohio.

Iggleston, S., Mul, J. & Zhang, J. (2009). Comparing public and private hospital health care quality, Stanford education centre, China.

Institute of Medicine. (2001). Crossing the Quality Chasm: *A New Health System for the 21st Century.* Washington D.C.: National Academy Press.
International Journal of Public Sector Management, **23** (3):203-220.

Irving, P. & Dickson, D. (2004). "Empathy: towards a conceptual framework for health professionals". *International Journal of Health Care Quality Assurance*, **17** (4). 212-220.

Iyaniwura, C. A. & Yussuf, Q. (2009). Utilization of antenatal care and delivery services in Sagamu, south western Nigeria. *African Journal of Reproductive Health,* **13**: 111-22.

Johansson, P., Oleni, M. & Fridlund, B. (2002). Patient satisfaction with nursing care in the context of health care: a literature study. *Scandinavian Journal of caring Science,* **16** (4): 337-344.

Kanani, S., Maneno, J. & Schluter, P. (1991). Health service management, Vol **1** Ministry of Health and Training Department, *African Medical Research Foundation,* Nairobi Kenya.

Kandampully, J. & Butler, L. (2001). Service guarantees: A strategic mechanism to minimize customers‟ perceived risk in service organizations. *Managing Service Quality*, **11** (1)112-121.

Kaseje, D. (2006). Health care in Africa: challenges, opportunities and an emerging model for improvement. Paper presented at Woodrow Wilson International Center for Scholar.

Kaye, D. (2000).Quality of midwifery care, East Africa medical Journal, **77** (10):558-559, Soroti, Uganda.

Kennedy, G., Bero, L., Shah, N. & Kinlaw, H. (2011). A Comparison of Health Outcomes in Public vs Private settings in Low- and Middle-Income Countries. *San Francisco: Global Health Sciences,* University of California.

Kenya Law Reports. (2011). www. Kenyalaw.org Retrieved.

Kimando, L. N. & Njogu, W.G. (2012).Factors That Affect Quality of Customer Service in the Banking Industry in Kenya: A Case Study of Postbank Head Office Nairobi, *International Journal of Business and commerce*, **1** (10): 82-105.

Kirby, F. (2005). Improvements in patient satisfaction, Journal of healthcare management, **50** (1): 62-68*west Jersey Hospital Voorhees*, New Jersey, USA.

Kothari, C. (2008). Research Methodology; *Methods and Techniques*. New Delhi: New Age International Publishers.

Kothari, R. (2004). Research methodology, *methods and techniques*, **Second revised edition**, New age International Publishers, New Delhi, India.

Kriastiansen, P. & Mooney, C. (2004). Evidence based medicine & clinical medicines decision making. Routedge, UK.

Krishna, R., David, H. & Karen, R. (2006). "Towards Patient Centered Health Services in India: A Scale to Measure Patient Perceptions of Quality", *International Journal for Quality in Health Care*, **18** (6): 414-442.

Kumaranayake, L. (1998). "Effective regulation of private sector health service providers". *London: Health Policy Unit*, Department of Public Health and Policy, London School of Hygiene and Tropical Medicine.

Lande, R., Golstein, B., & Bryant, R. (2002). Population reports performance improvement for population and information programme, The John Hopkins Bloomberg School of public health, Baltimore.

Lee, D., Alexander, A. & Bazzoli, J. (2003). Whom do they serve? Community responsiveness among hospitals affiliated with systems and networks. *Medical Care*, **41**: 165-174.

Lemessa, O. & Salomon, J. (2001). Satisfaction with outpatient health services at Jimma Hospital, *Ethiopian Journal of Health Development*, **15** (3):179-184 the Jimma University Ethiopia.

Leonard, K. L. & David, K. L. (2000). "The political economy of improving healthcare for the poor in rural Africa: Institutional solutions to the principal-agent problem". Paper presented at the conference on "New institutional theory, *institutional reform and poverty reduction*". Development Studies Institute, London School of Economics, 7-8 September.

Levin, A. T., Dmytraczenko, M., McEuen, F., Sengooba, R., Mangani, G. & Van, D. (2003). "Costs of Maternal Healthcare Services in Three Anglophone African Countries." *International Journal of Health Planning Management* **18** (1):3-22.

Lewins, A. & Silver, C. (2007). Using software in qualitative research: *A step-by-step guide.* London: Sage

Lewis, B. R. & Mitchell, V.W. (1990). "Defining and measuring the quality of customer service", *Marketing Intelligence and Planning*, **8** (6):11-17.

Lewis, R.C. & Booms, B. H. (1983).The Marketing Aspects of Service Quality In: Berry, *Emerging Perspectives on Service Marketing* **3**:99-107). Chicago: American Marketing Association.

Lievens, T., Serneels, P. Garbarino, S. & Quartey, P. (2011). "Creating Incentives to Work: *Results from a Qualitative Health Worker Study in Ghana*." *World Bank,* Washington DC.

Lindelow, M., Reinikka, R. & Svensson, J. (2003). "Healthcare on the Frontlines: Survey Evidence on Public and Private Providers in Uganda." *Africa Region Human Development Working Paper Series* No. **38**, World Bank, Washington, DC.

Luboga, S. A., Hagopian, A., Ndiku, J., Bancroft, E. & McQuide, P. (2011). "Satisfaction,

Lux, M. P., Fasching, P. A., Schrauder, M., Lohberg, C., Thiel, F. & Bani, M. R. (2011). The era of centers: the influence of establishing specialized centers on patients' choice of hospital. *Arch Gynecologist Obstetrician,* **283**:559-568.

Magnani, R. (1997). Sampling guides. Impact food Security and Ghana, *World Bank,* Washington, DC.

Makinen, M. S., Sealy, R., Bitran, A., Adjei, S. & Munoz, R. (2011). Private Health Sector Assessment in hospital service quality: a methodological study. *Managing Service Quality*, **9** (4):230-40.

Maphil. (2011). Htt://www.maphill.com/Kenya/Nairobi/simple-maps/blank-map.

Martinez, C. (1999). Measuring Nutrition Monitoring Project, Arlington, USA.

Matee, M., Lembariti, B., & Enm, S. (2006). Patients' sarisfaction with dental care provided by public dental clinic,*East African medical journal*, **83** (4): 1-2 Dar salaam, Tanzania.

Mayuri, D., Chandra, S. & Anatharama, R. (2006). Patient perceived dimensions of Total quality service in health care, India Institute of Technology Madras, *Benchmarking: International Journal,* **15** (5):560-583.

Mboya, T. & Michael, A. (2003). Health Professionals handbook on Quality Management in Healthcare in Kenya Centre for Quality in Healthcare Organization, Nairobi, Kenya.

Mella, P. (2002). Quality health care management. The nurses' role, keynote address, *National nurses association of Kenya scientific conference*. Nairobi, Kenya.Ministry of Devolution and Planning (2013). Kenya

Mliga, R. (2003). "Decentralization and the Quality of Healthcare in Tanzania." In D. K. Leonard, editor, *Africa's Changing Markets for Health and Veterinary Services*: The New Institutional Issues, London.

MOH. (1994). Health policy framework. Nairobi, Kenya.

MOH. (1996). Health sector reforms Implementation and evaluation of health managers. Nairobi, Kenya.

MOH. (1997). Information guide for planning, implementation and evaluation of health sector reforms. Nairobi, Kenya.

MOH. (2002). Key health standard and master checklist for health service and monitoring and evaluation. Department of standards and regulatory service. Nairobi, Kenya.

MOH. (2005). The Second National Health Sector Strategic Plan of Kenya (NHSSP II 2005-10); Reversing the trends: 1-69.

MOH. (2006). The Health sector; MTEF 2006/7-2008/9, Sector Working Group Report.

MOH. (2010). Kenya Health Policy Framework 1994 – 2010. The Kenya Institute for Public Policy Research and Analysis, Nairobi.

MOH. (2011). Clinical Audit of 18 hospitals, Nairobi, Kenya.

MOH. (2014-2030). Kenya Health Policy.

MOH. Ghana. (2002). The second health sector 5 year programme of work. Partnerships for health: *Bridging the inequalities gap*. Ghana

MOMS & MOPHS. (2009). Client Satisfaction Survey, Nairobi, Kenya.

MOMS & MOPHS. (2009). Final Report on the Review of the Partnership and Coordination Component of AOP 3 for the Kenya Health Sector. Nairobi, Kenya.

MOPHS. (2008). Public Health and Sanitation Strategic Plan, 2008-2012. Nairobi, Kenya.

Mufti, S., Qadri, G. J., Tabish, S. A. & Riyaz, R. (2008). "Patient's Perception of Nursing Care at a Large Teaching Hospital in India", *International Journal of Health Sciences,* **2** (2): 40-53.

Muga, R., Kizito, P., Mbayah, M. & Gakuruh, T. (2004). Overview of the health system in Kenya, *Kenya Service Provision Assessment* (KSPA), Kenya.

Mugenda, M. & Mugenda, G. (1999). Research methods. Actress press, Nairobi, Kenya.

Muhammed, M. & Mohammed, M. (2015). Patients' Satisfaction with Public Health Care Services in Bangladesh: Some Critical Issues, *Malaysia Journal of Medical and Biological Research,* **2**: 2.

Muhandwa, E., Leshabart, T., Mwangu, M., Mbembati, N. & Ezekiel, J. (2008) Patient satisfaction at the Muhimbili National hospital in Dar es salaam, Tanzania, *East Africa Journal of Public Health*, **5** (2).

Muthaka, D., Kimani, D., Mwaura. & Manda, D. (2004). A review of the regulatory framework for health care service in Kenya. *KIPPRA*, Nairobi, Kenya.

Mwabu, G., Wang'ombe, J., David, O. & Gasper, M. (2004). Improving Health policy in Africa. Published by University of Nairobi, Nairobi, Kenya.

Negi, R. (2009). Determining customer satisfaction through perceived service quality: A study of Ethiopian mobile users. *International Journal of Mobile Marketing*.

Nethi, S. & Suresh, B. (2012). Patient satisfaction in Hospital, *International Journal of Management Research and Business Strategy,* **1** (1) 3-7.

Newman, D., Gloyd, S., Nyangez, M. & Machoro, F. (1998). Satisfaction with outpatient health care services in Manica Province, *Journal of Health policy and planning,* **13**: 174-180. Mozambique.

Newman, W. L. (2003). Social Research Method: Qualitative and quantitative Approach. **Fifth Edition**, Ally and Bacon, Baston.

Ngugi, S.M (2002).Assessment of Obstetric Services and Pregnancy Outcomes at Kiambu District Hospital, Central Province, Kenya

Njenga, W. (2013). Barriers associated with the use of the Kenya quality model in St. Francis community hospital Kasarani, Nairobi, Kenya. *Thesis, report of Moi University.*

Nwabueze, A., Adogu, U., Ilika, A. & Asuzu, C. (2010). "Comparative Analysis of Patient Satisfaction Levels in HIV/AIDS Care in Secondary and Tertiary, Healthcare Facilities in Nigeria." *Afrimedic Journal* **1** (1): 6-9.

Nyangena, W. (2000). "Professional services in Kenya: Constraints and opportunities for trade". *World Bank.*

Nyongesa, W. M., Onyango, R. & Kakai, R. (2014). Determinants of client's satisfaction with healthcare at Pumwani Maternity Hospital Nairobi Kenya, *International Journal of Social and Behavioural Science* **2** (2): 11- 17.

O'Connor, J. & Shewchuk, R. (2003). "Commentary-patient satisfaction: what is the point?"*Health Care Management Review*, **28** (1):21- 24.

Odaga, J. (2004). Health inequality in Uganda – the role of financial and non-financial barriers. *Health Policy Development*. **2**:192–208.

Oduwo, R.N., Opondo, F.A., Kombe, Y., Ondolo, H. O., Ogwido, W.O. & Abdullah, M.S. (2001). "Kenya country report of the macroeconomic adjustment program health project". *Government of Kenya*.

Osungbade, O. & Kayode, O. (2013). "Patients' Satisfaction with Quality of Anti-Retroviral Services in Central Nigeria: Implications for Strengthening Private Health Services." *World Journal of Preventive Medicine* **1** (3): 11-18.

Otani, K, Kurz, R. S. & Harris, L.E. (2005). (Managing primary care using patient satisfaction measures), *Journal of Healthcare Management*, **5** (5): 311-25.

Ovreyveit, J. (2000). Evaluating health intervention, Open University Press, Buckingham, Philadelphia.

Owino, W. & Korir, J. (2000). Public Health Sector Efficiency in Kenya: *Estimation and Policy Implications.* Nairobi: Institute of Policy Analysis and Research.

Owusu-Frimpong, N., Nwankwo, S. & Dason, B. (2010). Measuring service quality and patient satisfaction with access to public and private healthcare delivery.

Pakdil, F. & Harwood, T. N. (2005). Patient satisfaction in a preoperative assessment clinic: an analysis using SERVQUAL dimensions. *Total Quality Management & Business Excellence*, **16** (1):15-30.

Parasuraman, A., Berry, L. & Zeitham, A. (1991). "Refinement and Reassessment of the SERVQUAL Scale", *Journal of Retailing*, **67** (4): 420-450.

Parasuraman, A., Zeithaml, A. & Berry, L. (1980). "SERVQUAL: A Multiple-Item Scale for Measuring Consumer Perceptions of Service Quality", *Journal of Retailing*, **64** (1): 12-40.

Parasuraman, A., Zeithaml, V.A. & Berry, L.L. (1985). A conceptual model of service quality and its implications for future research. Journal of Marketing, **49** (4): 41-50.

Parasuraman, A., Zeithaml, V.A. & Berry, L.L. (1988). SERVQUAL: a multiple-item scale for measuring consumer perceptions of service quality", *Journal of Retailing*, **64** (2).12- 37.

Patouillard, E., Goodman, A., Hanson, G. & Mills, J. (2007). Can working with the private for-profit sector improves utilization of quality health services by the poor? A systematic review of the literature. *International Journal of Health Planning and Management*, **6**: 273-275. Philippines.

Pickering, E. (1991). New approaches to hospital accreditation. Pan American Health Organization, *World Health Organization, and Latin American Federation of Hospitals.*

Polluste, K., Kalda, R. & Lember, M. (2000). "Primary healthcare system in Transition: the patient's experience*", International Journal for Quality in Health Care,* **12** (6):503-9.

Prata N, Montagu D, Jefferys E. (2005). Private sector, human resources and health franchising in Africa. *Bull World Health Organ*, **83**:274–279.

Prattana, P., Nattapana, B., Patchaya, M. & Kanokpon, L. (2012). Health Care service Quality, *Case example of a Hospital with Lean Implementation*, Chicago, Illinois, U.S.A.

Prattana, P., Nattapana, B., Patchaya, M. & Kanokpon, L. (2013). Health Care service Quality, College of Management, Mahidol University, Bangkoki Thailand.

Pui-Mun L., Poh K. & Dhanjoo, N. G. (2006). Impact of deficient healthcare service quality. *The TQM Magazine*, **18** (6): 563-571.

Qayum, A. Q., Qadiri, J. & Farooq, A. (2010). Status of Quality Assurance Practices in Selected Teaching Hospitals of Kashmir. Division Department of Hospital Administration, Sher-I- Kashmir, *Institute of Medical Sciences*, Srinagar, India .JIMSA, **23** (2): 118-123 .

Quadiri, G. J. (1999). "Why quality management "Quality management newsletter, *Quality management department*, MOH, KSA; **1** (2): 2-4.

Rakodi, C. (1996). The role of Government in Adjusting Economics: *The opinions of Health and water service users in Ghana*. Paper no. **10**. Edgbaston, U.K: Overseas Development Administration.

Ramsaran-Fowdar, R. R. (2008). The relative importance of service dimensions in a healthcare setting. *International Journal of Health Care Quality Assurance*, **21** (1): 104-124.

Reinartz, W. J. (2004). „The customer management process: Its measurement and impact on performance". *Journal of Marketing Research*, **41** (3):293-305.

Reinikka, R. & Svensson, J. (2010). "Working for God? Evidence from a Change in Financing of not-for-profit Healthcare Providers in Uganda." *Journal of the European Economic Association* **8**:1159-78.

Republic of Kenya (ROK). (2005). Nairobi Health Management Board: *Strategic plan 2005-2010*, Ministry of Local Government, Nairobi Kenya.

Republic of Kenya. (2002). National Development Plan, 2002-2008. Nairobi: Government Printer.

Richard, G. (2000). "Between Evidence based practice and Total Quality Management: the implementation of cost effective care", *International Journal for Quality in Health Care*, **12** (4):297-304.

Rundall, G., Starkweather, B. & Norrish, R. (1998). After restructuring-empowerment strategies at work in American's Hospital, Dossey – Bass Publisher, **First Edition**, California , Berkeley, USA.

Rundall, G., Starkweather, B. & Norrish, R. (2002). Chronic care management in nine leading US physician organizations. *British Medical Journal*. **325**: 958-961.

Sadiq, S. M. (2003). "Service Quality in Hospitals: More Favorable Than You Might Think", *Managing Service Quality* (Emerald-MCB), **13** (3): 197-20.

Saila, T., Mattila, E., Kaila, M., Aalto, P and Kauninen, M. (2008). Measuring patient assessment of quality of outpatient care: a systemic review. *Journal of Evaluation in Clinical Practice*, **14**:148-154.

Sajid, S. (2007). Quality of health care on absolutely necessity for public satisfaction. Department of vascular surgery Royal free hospital, London, U.K

Saunders, M. Lewis, P. & Thornhill, A. (2007). Research methods for business students. **Fourth edition**. Harlow: FT/Prentice Hall.

Savigny, D., Kasale, H., Mbuya, C. & Reid, G. (2004). Fixing Health Systems, *Ministry of Health*, Tanzania. International Development Research Center, Ottawa.

Sayed, H. (2012). Patient satisfaction regarding hospital service. A study of UMEA Hospital.

Schmid, B., Thomas E., Olivier, J. & Cochrane, R. (2008). "The Contribution of Religious Entities to Health in sub-Saharan Africa." Cape Town: *African Religious Health Assets Programme.*

Scott, W.G. & Helen, M. S. (2002). Health policy in a democratic mixed market economy. *A paper presented at the Hawaii international conference on social sciences,* Honolulu.

Seats ii project. (2000). Mainstreaming quality improvement in family planning and reproductive health service delivery. *(USAID).*

Sekaran, U. (2003). Research methods for business: *A skill building approach.* **Fourth edition.** New York: John Wiley & Sons, Inc.

Shelton, P. (2006). Measuring and improving patient satisfaction. Oxford press, London, U.K.

Shojo, M., Tsimpo, C. & Wodon, Q. (2012). "Satisfaction with and Reasons for Choosing Faith-inspired Health Care Provision in Ghana." *The Comparative Nature of Faith-inspired Health Care Providers in sub-Saharan Africa, HNP Discussion Papers,* World Bank, Washington, DC.

Soeung, S.C., Grundy, J., Morn, C. & Samnang, C., (2008). Evaluation of immunization knowledge, practices, and service-delivery in the private sector in Cambodia. *Journal of Health Population Nutrition,* **26:95**–104.

Stanfield, S. (2005). Structuring information and Incentives to Improve Health. *Bulletin of World Health Organization.* **83** (8): 562-563.

Szyca, R., Rosiek, A., Nowakula, U. & Leksowki, K. (2012). Analysis of factors influencing patient satisfaction with hospital treatment at the surgical department. *Polish Journal of surgery*, **84** (3): 136-143. Poland.

Tam, J. L. M. (2005). Examining the Dynamics of Consumer Expectations in a Chinese Technologies". *Journal of Marketing*. **66** (3): 98-111.

Tam, J.L.M. (2007). Linking quality improvement with patient satisfaction: a study of health service centre. *Marketing Intelligence and Planning,* **25** (7), 732-745.

Taner, T. & Antony, J. (2006). "Comparing public and private hospital care service quality in Turkey", *Leadership in Health Services*, **19** (2):1-10.

Taylor, C. (2002). The 5Qs model at some Egyptian and Jordanian medical clinics. *International Journal of Health Care Quality Assurance*, **19** (1): 60-92.

Taylor,T., & Taylor, C. (2002). Just and Lasting Change: When the Communities own their Futures. The John Hopkins University Press, Baltimore, USA.

Thomas, E., Schmid, B., Gwele, M., Ngubo, R. & Cochrane, J. R. (2006) "Let us Embrace: The Role and Significance of an Integrated Faith-based Initiative for HIV and AIDS." Cape Town: *African Religious Health Assets Programme*.

Tonio. S, Joerg, K. & Joachim, K. (2011). Determinants of patient satisfaction: a study among 39 hospitals in an in-patient setting, Department of Public Health, Dresden Medical *International Journal for Quality in Health Care*, **23** (5): 503–509, Germany.

Tucker, J. L. & Adams, S. R. (2001). Incorporating patients' assessments of satisfaction and quality: an integrative model of patients' evaluations of their care. *Managing Service Quality,* **11** (4):272-287.

Uganda Ministry of Health Uganda. (2007). Annual Health Sector Performance Report Financial Year Kampala, Uganda: Ministry of Health.

UNDP. (2004).Cultural Diversity in Today's Diverse World. *Human Development Report*. **1**, New York.

Unger, J., De Paepe, P., Ghilbert, P., Soors, W. & Green, A. (2006). Disintegrated care: the Achilles heel of international health policies in low and middle-income countries. *International Journal of Integrated Care* **6** (18):209-216.

USAID. (2001). Performance improvement, institute for healthcare improvement.

USAID. (2006). Health care Improvement project, institute for healthcare improvement.

Uzochukwua, B. (2005). Health care is reform involving the introduction of user fees and drug revolving funds: influence on health workers behaviour in Southeast. *Health policy Journal* **75** (1):1-8, University of Nigeria, Enugu, Nigeria.

VanEjik, A.M., Bles, H.M., Odhiambo, F., Ayisi, J.G., Blokland, I.E., Rosen, D.H., Adazu, K., Slutsker, L. & Lindblade, K.A. (2006). Use of antenatal services and delivery care among women in rural western Kenya: *a community based survey*. Reproductive Health, 3:2.

Vera, H. (1993). "The client's view of high-quality care in Santiago, Chile", *Studies in Family Planning,* **24** (1): 40-9.

Von-Schirnding, Y. (2002). Health in Sustainable Development Planning; The Role of indicators, WHO, Geneva, Switzerland.

W H O. (2007).Towards primary health care: Renewing partnerships with faith-based communities and services. WHO, Geneva.

Waddington, C. & Enyimayew, M. (1990). A price to pay: the impact of the user charges in the Volta Region, Ghana. International Journal of Health planning and management **4** (1): 17-47.

Walt, G. (2004). Health Policy: An introduction to process and power. London, Zed books.

Wambugu, N. (2012). Service quality practices among Commercial Banks in Kenya. Unpublished MBA. *Research Project, University of Nairobi*, Nairobi, Kenya.

Wang'ombe, J. K., Mwaniki, P., Mitula, M., Mugo, D., Nzoya, I., Muasya, D. & Muchunga, E. (1998). "Capacity of non- governmental providers in delivery of healthcare in Kenya". *A report presented to the health sector support programme.* Nairobi: Ministry of Health.

Wanjau, K. N., Muiru, W. B. & Eunice, A. (2012). Factors Affecting Provision of Service Quality in the Public Health Sector: A Case of Kenyatta National Hospital. International Journal of Humanities and Social Science, Vol. **2**: 13.

Webster, C. (1989). Can consumers be segmented on the basis of their service quality expectations? *Journal of Services Marketing*, **3** (2): 35-53.

Weitzman, C. (1995). Health care delivery in the United States, Fifth **edition**. Berlin: Springer.

WHO. (2000). Health system improving performance. WHO, Geneva.

WHO. (2006).A process for making strategic choices in health systems. WHO, Geneva.

WHO. (2008). Integrated Health Services – What and Why? Technical Brief No. **1**. Geneva: WHO.

WHO. (2009). The World Health Report: Primary Health Care: Now More than Ever. WHO, Geneva.

WHO. (2007).Strengthening Health Systems to Improve Health Outcomes: WHO's framework for action. WHO, Geneva.

Widmer, M., Betran, A., Merialdi, M., Requejo, J. & Karpf, T. (2011). "The Role of Faith-based Organizations in Maternal and Newborn Healthcare in Africa." *International Journal of Gynecology and Obstetrics*, **114**: 218-22.

Wiggers, H., Kathleen, D., Selina, R. & Rob, F. (1990). Cancer Patient Satisfaction with Care. *Cancer*, **66**: 610-616.

Wilkinson J. (1989). Making Men Whole – the theology of medical missions. *Maxwell Memorial Lecture.* London: CMF.

Wilson, A., Zeithaml, V. A., Bitner, M. J. & Gremler, D.D. (2008). Services Marketing. 1st European edition, McGraw-Hill Education.

Wisniewski, M. & Donnelly, M. (1996). "Measuring service quality in the public sector: the potential for SERVQUAL", *Total Quality Management*, **7** (4): 357-365.

Wisniewski, M. (2001). "Using SERVQUAL to assess customer satisfaction with public sector services", Managing Service Quality, **11** (6):380-388.

Wodon, Q. (2013). Faith and Human Development: Education and Health Services in Africa, New York: Palgrave MacMillan.

Wonderling, D., Gruen, R. & Black, N. (2005).Introduction to Health economics, Understanding Public Health, London school of hygiene and Tropical Medicine. Open University Press, UK.

World Bank. (1986). Financing Health Services in Developing Countries: An Agenda for Reform. Washington.

World Bank. (2005). Comparative advantages of public and private health care providers in Bangladesh. Dhaka: *World Bank*.

World Bank. (2006). World Development Indicators.

World Bank. (2011). Private health sector assessment in Ghana. Washington (District of Columbia): World Bank.

YogeshPai, P., Gaurav, R. & Satyanarayana. C. (2011). "Factors Affecting in Patient Satisfaction in Hospital: A Case Study", *International Conference on Technology and Business Management* March 28-30, 2011.

Yousef, A. & Mohamed, A. (2011). "Patients' Satisfaction with Medical Services in the Qassim Area", *Journal of Clinical and Diagnostic Research*, **5** (4): 813-81.

Zahida, A. (2012). Health care facilities and patients satisfaction: a case study of civil hospital Karachi, Pakistan. *Interdisciplinary journal of contemporary research in business* **4** (1): 781-799.

Zeithaml, A., & Bitner, J. (2000). Services marketing. New York: McGraw-Hill.

Zeithaml, A., Parasuraman, A. & Berry, L. (1990). Delivering Quality Service: *Balancing Customer Perceptions and Expectations, Free Press*, New York.

Zineldin, M. (2006). The quality of health care and patient satisfaction: An exploratory investigation. *International Journal of health care quality assurance*, **19** (1): 60-92.

Zuckerman, M., Navizedeh, N., Feldman, J., Mc-Calla, S. & Minkoff, H. (2002). Determinants of women's choice of obstetrician/gynecologist. *Journal of Women's Health* (Larchmt), **11**:175-180.

APPENDICES

Appendix1

Informed Consent

Dear Sir/ Madam,

My name is Sr. Margaret Wandera I am a postgraduate student at Maseno University. As part of my course requirement lam carrying out a study on "**Client perception on quality of health care offered to in-patients in public and faith based hospitals in Kiambu and Nairobi counties, in Kenya: a comparative study".**The study will enable the hospitals to serve their patients better by identifying the issues that need to be addressed to ensure quality healthcare services is offered to patients. The study will ensure confidentiality of all information's given to the researcher by using anonymous questionnaires and making sure no other person other than the research team have access to the information obtained. Your participation or no participation in the study would not affect the health care provided to you in the hospital.

Do you accept to participate: 1. Yes 2. No

Thanks in advance for your cooperation

Interviewer's signature _____Date_____

Appendix 2

QUESTIONNAIRE 1: PART A- DEMOGRAPHIC CHARACTERISTICS

Interviewers' name ----------Date of interview ----------
Place of residence.....
Type of facility
1. Public 2. Faith-based (please tick one)

Demographic characteristics

1 Age

1. 15 -25
2. 25- 35
3. 35-45
4. 45- 55
5. 55-65
6. 65 and above

2 Sex

1. Male 2. Female

3. What is the nature of your occupation?

1. Casual employment
2. Permanent and pensionable
3. Contract employment
4. Self employed
5. None

4. What is your last completed level of education?

1. None 2. Primary 3. Secondary 4. Tertiary 5. University

5. What is your marital status?

1. Single
2. Married
3. Divorced
4. Separated
5. Widowed
6. Refused

7. What is your religion?

1. Muslim 2. Christian 3. Hindus 4. Traditional

Appendix 3

QUESTIONNAIRE 1: PART B- UNSTRUCTURED QUESTIONS FOR QUALITY DIMENSIONS THAT CONTRIBUTES TO PATIENT'S SATISFACTION

Permission received to continue? 1. Yes 2. No

Code of facility.....

Type of facility.....

Name of interviewer.....

Date of interview.....

1. Which attributes make you happy or satisfied with service received in this hospital?

2. What do you think affects health services in this hospital?

3. What recommendations would you make for improving conditions of health care quality in this hospital?

4. How do you rate health care quality of services provided in this hospital?

Appendix 4

QUESTIONNAIRE 1: PART C-PERCEPTION OF PATIENTS ON PUBLIC AND FAITH-BASFD HOSPITALS SERVICE QUALITY

1. Physical facilities are visually appealing

1. Strongly disagree 2. Disagree 3. Undecided 4.Agree 5.Strongly agree

2. Cleanliness in the ward/room is high

1. Strongly disagree 2. Disagree 3. Undecided 4.Agree 5.Strongly agree

3. Toilet facilities are clean

1. Strongly disagree 2. Disagree 3. Undecided 4.Agree 5.Strongly agree

4. Hospital linens are clean

1. Strongly disagree 2. Disagree 3. Undecided 4.Agree 5.Strongly agree

5. Diagnostic services are available and reliable

1. Strongly disagree 2. Disagree 3. Undecided 4.Agree 5.Strongly agree

6. The hospital has adequate health service providers

1. Strongly disagree 2. Disagree 3. Undecided 4.Agree 5.Strongly agree

7. The cost of services received in this hospital is reasonable

1. Strongly disagree 2. Disagree 3. Undecided 4.Agree 5.Strongly agree

8. The medicines are available in this hospital

1. Strongly disagree 2. Disagree 3. Undecided 4.Agree 5.Strongly agree

9. Admission procedure is fast

1. Strongly disagree 2. Disagree 3. Undecided 4.Agree 5.Strongly agree

10. On the whole, registration procedure is good

1. Strongly disagree 2. Disagree 3. Undecided 4.Agree 5.Strongly agree

11. Doctor has given satisfactory time to narrate the illness

1. Strongly disagree 2. Disagree 3. Undecided 4.Agree 5.Strongly agree

12. You received prompt service from employees in this hospital.

1. Strongly disagree 2. Disagree 3. Undecided 4.Agree 5.Strongly agree

13. Food served as per suggestions of the doctor

1. Strongly disagree 2. Disagree 3. Undecided 4.Agree 5.Strongly agree

14. The admission procedure of this hospital is good

1. Strongly disagree 2. Disagree 3. Undecided 4. Agree 5.Strongly agree

15. People at the registration counter are helpful

1. Strongly disagree 2. Disagree 3. Undecided 4.Agree 5.Strongly agree

16. You felt satisfied with the service provided

1. Strongly disagree 2. Disagree 3. Undecided 4.Agree 5.Strongly agree

17. Health providers gave proper medical care

1. Strongly disagree 2. Disagree 3. Undecided 4.Agree 5.Strongly agree

18. Attitude of doctor is satisfactory

1. Strongly disagree 2. Disagree 3. Undecided 4.Agree 5.Strongly agree

19. Behavior of nursing staff is good

1. Strongly disagree 2. Disagree 3. Undecided 4.Agree 5.Strongly agree

20. You can trust employees of this hospital

1. Strongly disagree 2. Disagree 3. Undecided 4.Agree 5.Strongly agree

21. You feel safe in your transactions with health care providers.

1. Strongly disagree 2. Disagree 3. Undecided 4.Agree 5.Strongly agree

22. You would return to this hospital for treatment

1. Strongly disagree 2. Disagree 3. Undecided 4.Agree 5.Strongly agree

23. Doctors give sufficiency attention to the patients

1. Strongly disagree 2. Disagree 3. Undecided 4.Agree 5.Strongly agree

24. Staff services and level of care is good

1. Strongly disagree 2. Disagree 3. Undecided 4.Agree 5.Strongly agree

25. The providers seemed concerned about your needs

1. Strongly disagree 2. Disagree 3. Undecided 4.Agree 5.Strongly agree

26. You were satisfied with the completeness of the information given to you about your problem

1. Strongly disagree 2. Disagree 3. Undecided 4.Agree 5.Strongly agree

Appendix 5

QUESTIONNAIRE 2: PART A: FACILITY ASSESSMENT CHECKLIST

	Code of facility _____ Date _____	Yes Score1 No Score 0
	Type of facility _____	
	Name of interviewer (observer) _____Date _____	Tick one
1	Is there signboards showing direction and clearly displayed?	1. Yes 2. No
2	Is the compound well managed? (cut grass)	1. Yes 2. No
3	Is laundry properly managed?	1. Yes 2. No
4	Is the health facility licensed?	1. Yes 2. No
5	Does the hospital have well managed mortuary?	1. Yes 2. No
6	Is the hygienic in the kitchen maintained and food guideline available?	1. Yes 2. No
7	Is there safe water in the facility and available at all times?	1. Yes 2. No
8	Are there patients and staff toilets/latrines that are clean?	1. Yes 2. No
9	Does the health facility have functioning placenta pit?	1. Yes 2. No
10	Is there functioning incinerator in the facility?	1. Yes 2. No
11	Is there functioning drainage system for sewage and rain water?	1. Yes 2. No
12	Does the health facility regular and reliable power supply and sufficient?	1. Yes 2. No
I3	Is there adequate ventilation and lighting in the rooms?	1. Yes 2. No
14	Is the facility fenced to provide the security for the facility and clients?	1. Yes 2. No
15	Is the compound free from harmful insects/ pest or vector	1. Yes 2. No
16	Are the floors and walls well maintained? (No cracks)	1. Yes 2. No
17	Are the roofs and windows well maintained? (No leakage)	1. Yes 2. No
18	Are there standards and procedures available in each department?	1. Yes 2. No

19	Are there health education materials for prevention and control of disease displayed?	1. Yes 2. No
20	Are there health education materials displays in health facility?	1. Yes 2. No
21	Are the in-patient uniforms available and inacceptable conditions?	1. Yes 2. No
22	Is there linen for beds available and an acceptable condition?	1. Yes 2. No
23	Does in-patient receives regular meals of acceptable balanced diet?	1. Yes 2. No
24	Are there recommended protocol and proper information system like, Patient records, Temperature chart, Fluid charts, pantographs, Antenatal cards, Child welfare cards Registers, Birth and death notification form,	1. Yes 2. No
25	Does the hospital have mission statements and service standards which inform workers and service users about expected standards?	1. Yes 2. No

Appendix 6

QUESTIONNAIRE 2: PART B-Diagnostic Checklist, Name Of Interviewer……Dates….

TYPE OF EQUIPMENT	**AVAILABILTY**	**FUNCTIONAL**	**IN USE**	**CODE, YES 1 NO 0**
X- Ray machine	Yes No	Yes No	Yes No	☐
Weighing scale	Yes No	Yes No	Yes No	☐
Sanction machine	Yes No	Yes No	Yes No	☐
Oxygen concentrator	Yes No	Yes No	Yes No	☐
Microscope	Yes No	Yes No	Yes No	☐
Centrifuge	Yes No	Yes No	Yes No	☐
Autoclaves	Yes No	Yes No	Yes No	☐
Refrigerator	Yes No	Yes No	Yes No	☐
Screen /examination coaches	Yes No	Yes No	Yes No	☐
Haematology analyser	Yes No	Yes No	Yes No	☐

Appendix 7

Facility Owners/ Categories

Ministry of Health - Constituting both the Ministry of Medical Services and the Ministry of Public Health and Sanitation
Other Public Institutions • Local Authority • Prisons • Armed Forces* • Academic (if registered) • Parastatal • Community • CDF • LATF
Faith Based Organizations • Christian Health Association of Kenya • Kenya Episcopal Conference-Catholic Secretariat • Supreme Council for Kenya Muslims • Other Faith Based
Non-Governmental Organizations **Humanitarian Agencies**
Private Medical Enterprises • Private Institution • Company Medical Service • Other Private **Private Practice** • Private Practice - General Practitioner • Private Practice - Medical Specialist • Private Practice – Nurse / Midwife • Private Practice – Clinical Officer

Source :(MOMS and MOPHS, 2010)

Appendix 8

Summary of Cronbach Interpretation

Cronbach's alpha	Internal consistency
$\alpha \geq 0.9$	Excellent (High-Stakes testing)
$0.7 \leq \alpha < 0.9$	Good (Low-Stakes testing)
$0.6 \leq \alpha < 0.7$	Acceptable
$0.5 \leq \alpha < 0.6$	Poor
$\alpha < 0.5$	Unacceptable

Source: https://en.wikipedia.org/wiki/Cronbach's_alpha

Appendix9

A Letter from NCST

REPUBLIC OF KENYA

HARAMBEE

NATIONAL COUNCIL FOR SCIENCE AND TECHNOLOGY

Telephone: 254-020-2213471, 2241349
254-020-310571, 2213123, 2219420
Fax: 254-020-318245, 318249
When replying please quote
secretary@ncst.go.ke

P.O. Box 30623-00100
NAIROBI-KENYA
Website: www.ncst.go.ke

Our Ref: **NCST/RCD/12A/012/57**

Date: **22nd May 2012**

Margaret Wandera Nyongesa
Maseno University
P.O.Box 333-40105
Maseno.

RE: RESEARCH AUTHORIZATION

Following your application for authority to carry out research on ***"Evaluation of the level of quality Health Care according to patients in selected public and private hospitals in Kiambu and Nairobi Areas in Kenya,"*** I am pleased to inform you that you have been authorized to undertake research in **Kiambu, Langata and Makadara Districts** for a period ending **31st July, *2012.***

You are advised to report to **the Chief Executive Officers, Private Hospitals and the Medical Officers of Health of the selected Districts** *before embarking on the research project.*

On completion of the research, you are expected to submit two hard copies and one soft copy in pdf of the research report/thesis to our office.

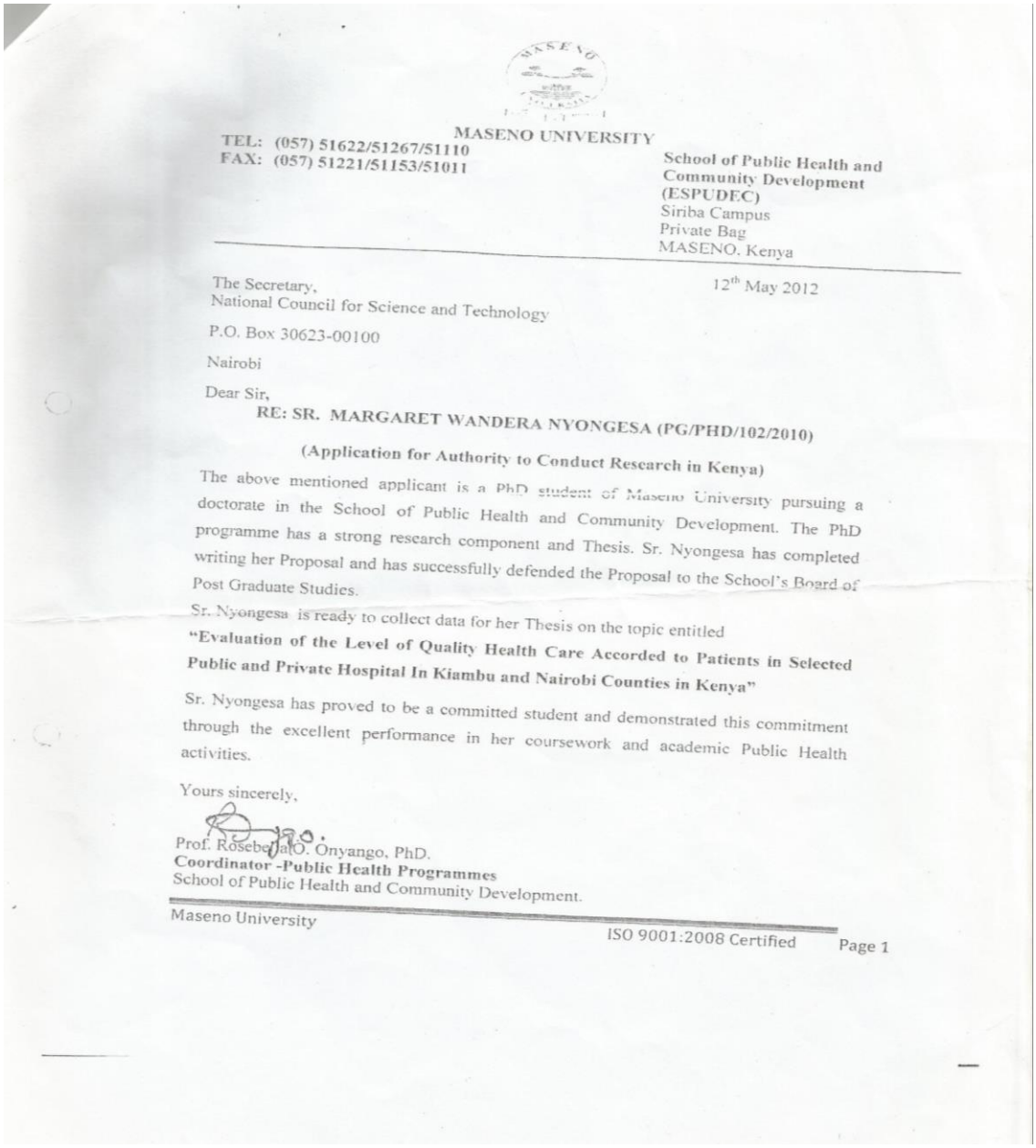
DR. M. K. RUGUTT, PhD, HSC.
DEPUTY COUNCIL SECRETARY

Copy to:

The Chief Executive Officers
Private Hospitals

Appendix 10

Letter from School of Public Health to Conduct Research



MASENO UNIVERSITY

TEL: (057) 51622/51267/51110
FAX: (057) 51221/51153/51011

School of Public Health and Community Development (ESPUDEC)
Siriba Campus
Private Bag
MASENO. Kenya

The Secretary,
National Council for Science and Technology
P.O. Box 30623-00100
Nairobi

12th May 2012

Dear Sir,

RE: SR. MARGARET WANDERA NYONGESA (PG/PHD/102/2010)

(Application for Authority to Conduct Research in Kenya)

The above mentioned applicant is a PhD student of Maseno University pursuing a doctorate in the School of Public Health and Community Development. The PhD programme has a strong research component and Thesis. Sr. Nyongesa has completed writing her Proposal and has successfully defended the Proposal to the School's Board of Post Graduate Studies.

Sr. Nyongesa is ready to collect data for her Thesis on the topic entitled **"Evaluation of the Level of Quality Health Care Accorded to Patients in Selected Public and Private Hospital In Kiambu and Nairobi Counties in Kenya"**

Sr. Nyongesa has proved to be a committed student and demonstrated this commitment through the excellent performance in her coursework and academic Public Health activities.

Yours sincerely,

Prof. Rosebella O. Onyango, PhD.
Coordinator -Public Health Programmes
School of Public Health and Community Development.

Maseno University ISO 9001:2008 Certified Page 1

Appendix 11

Permission from Kiambu County Hospital

TO: WHOM IT MAY CONCERN 5th JUNE 2012

Sis Margret Wandera

Please allow the above named student to collect data together with her assistances Mr. Sakwa, Mis. Njeri

Student Co.Ordinator

Kiambu hospital

KIAMBU DISTRICT HOSPITAL
DATE: 5/June
SIGN:
TEL: 0721-864258
P.O. BOX ... KIAMBU
C.M.E. ... MENT

Appendix 12

Quality Policy Statements of the Study Hospitals

Kiambu County hospital

Vision

A world of healthy families through universal access to health interventions and services

Mission

Optimize delivery and use of health interventions to communities through evidence-informed solutions, innovations and research to address existing and emerging public health needs.

Our Corporate Values

Integrity- We provides services in an accountable and responsible manner.

Partnership– We collaborates with government, donors, other stakeholders and communities to complement and synergize in the delivery of sustainable health services.

Commitment – We are dedicated to improving the health of communities

Results orientated – We focus on efficient processes that maximize output

Excellence – We strive for quality in our service delivery

Innovation – We develop and apply new interventions to address public health.

NAZARETH MISSION HOSPITAL

Mission

We, Mercy Health System and Trinity Health, serve together in the spirit of the Gospel as a compassionate and healing presence within our communities. In fulfilling our mission, we have a special concern for persons who are poor and disadvantaged.

Vision

As a mission-driven regional health ministry, we will become the recognized leader in improving the health of our communities and each person we serve. We will be known as the most trusted health partner for life.

Core Values

Mercy Health System is motivated by faith in a merciful God, and works to actualize that faith.

Reverence

We honor the sacredness and dignity of every person.

Commitment: To Those Who Are Poor

We stand with and serve those who are poor, especially those most vulnerable.

Justice

we foster right relationships to promote the common good, including sustainability of Earth.

Stewardship

We honor our heritage and hold ourselves accountable for the human, financial and natural resources entrusted to our care.

Integrity

We are faithful to who we say we are.

JAMAA MISSION HOSPITAL

Our Mission

Our Mission is to improve the health of the people of Kenya.

- Serve people as a not-for-profit health system governed by a voluntary community board.
- Ensure sustainability through stewardship of the community's assets.
- Provide quality services in a compassionate and cost-effective manner.
- Collaborate in order to improve access across the entire continuum of care.
- Promote wellness and health to benefit the community.

Our Values

As the regional leader in advanced medical care, we take our responsibilities seriously. Our mission, vision and core values help guide us as we work to help and heal each patient in our care.

Our BIGGER) Aim:

To get each patient to the desired outcome, first without harm, also without waste and with an exceptional experience for the patient and family

Our MERIT Values

Five core values- Mercy, Excellence, Respect, Integrity and Trust/Teamwork- form the foundation for our culture at Mission Hospital.

- Mercy - We work to create a caring and compassionate environment responsive to the emotional, spiritual and physical needs of all persons.
- Excellence - We strive to meet or exceed patient/customer needs and expectations and work as a team to improve every aspect of care and service in our organization.
- Respect - We value the innate dignity of all persons, respect their uniqueness and diversity and enable the development of each one's full potential.
- Integrity - We are consistently open, honest and ethical and abide by the Mission Hospitals Integrity statement.
- Trust/Teamwork - We say what we mean and do what we say.

MBAGATHI HOSPITAL

Vision: To be the leading health services provider for students, staff and their dependents

Mission: To be a leading preferred health care provider in the work place maintaining health of staff and students by providing internationally recognized standards of health care.

Core values:

In order to realize the vision and mission, the following shared values shall be nurtured by the UHS:

- Professionalism and ethics
- Confidentiality
- Respect for human dignity and rights
- Truthfulness, honesty and integrity
- Diligence and competence
- Efficiency and effectiveness
- Timeliness
- Accountability and transparency
- Team work
- Tolerance
- Environmental friendliness