

**EFFECT OF TOTAL QUALITY MANAGEMENT (TQM) PRACTICES ON SERVICE
DELIVERY IN HEALTH SECTOR IN NAIROBI COUNTY, KENYA**

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MASTER OF BUSINESS ADMINISTRATION (CORPORATE MANAGEMENT)

KCA UNIVERSITY

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**A DISSERTATION SUBMITTED IN PARTIAL FULFILLMENT OF THE
REQUIREMENTS FOR THE AWARD OF MASTER OF BUSINESS
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KCA UNIVERSITY**

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DECLARATION

I hereby declare that this dissertation is my original work and has not been submitted to any other institution or examination body for any academic award and that this research project contains no material written or published by other people except where due reference is made and author duly acknowledged.

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18 June 2022

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This dissertation has been submitted for review with the approval of my project supervisor.

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ABSTRACT

This study sought to examine the influence of Total Quality Management practices on quality services in healthcare sector in Nairobi County, Kenya. Specifically, this study examined the influence of customer focus, quality improvement, employee involvement and management support on quality services in healthcare sector in Nairobi County. The study adopted cross-sectional descriptive design and targeted healthcare providers in five hospitals (three public and two private) in Nairobi County including; Mbagathi hospital, Mama Lucy hospital, Pumwani hospital, Coptic hospital and Aga Khan Hospital. Yamane (1967) formula was used calculate the sample size of 115 respondents from healthcare workforce population of 1,652. Data was collected using questionnaires and analyzed through descriptive and inferential statistics. The study found that customer focus promoted effective assessments and follow-ups on patients and helped to build strong relationships between healthcare providers and patients through effective communication and continuous quality improvement through CQI teams and routine MDTs promoted service quality while employee involvement enhanced motivation and productivity of staff. Management support was essential in setting and ensuring implementation of goals and vision of healthcare facilities, motivation of staff and resource mobilization to implement core services in healthcare facilities. The study concluded that there is a significant relationship between TQM practices and quality services in healthcare sector in Nairobi County, Kenya and recommended that healthcare facilities (public & private) should bolster implementation of TQM interventions since they promote quality of services.

DEDICATION

I dedicate this work to my family; my husband Mr. Amayo, children Femi, Kelly and Bellah who have been very supportive of me in my studies. May God richly bless you for your encouragement and continued support. I truly appreciate.

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TABLE OF CONTENTS

DECLARATION.....	ii
ABSTRACT.....	iii
DEDICATION.....	iv
ACKNOWLEDGEMENTS	v
TABLE OF CONTENTS	vi
LIST OF TABLES	x
LIST OF FIGURES	xi
ACRONYMS AND ABBREVIATIONS.....	xii
OPERATIONAL DEFINITION OF TERMS.....	xiii
CHAPTER ONE	1
INTRODUCTION.....	1
1.1 Background to the Study	1
1.1.1 Total Quality Management.....	2
1.1.2 Quality of Service Delivery	3
1.1.3 Healthcare Sector in Kenya	4
1.2 Statement of the Problem	6
1.3 Research Objectives	7
1.3.1 General Objective	7
1.3.2 Specific Objectives	7
1.4 Research Questions	8
1.5 Justification of the Study.....	8
1.6 Scope of the Study.....	9
CHAPTER TWO	10
LITERATURE REVIEW	10
2.1 Introduction	10

2.2 Theoretical Review	10
2.2.1 Customer Focus Theory.....	10
2.2.2 GAP Theory.....	11
2.2.3 SERVQUAL Model	13
2.3.4 Leadership Participation Model.....	14
2.3 Empirical Review	15
2.3.1 Customer Focus and Quality of Service Delivery	15
2.3.2 Continuous Quality Improvement and Quality of Service Delivery	19
2.3.3 Employee Involvement and Quality of Service Delivery.....	23
2.3.4 Management Support and Quality of Service Delivery.....	27
2.4 Research Gap.....	33
2.5 Conceptual Framework	33
2.6 Operationalization of Variables	35
CHAPTER THREE	36
RESEARCH METHODOLOGY	36
3.1 Introduction	36
3.2 Research design.....	36
3.3 Target Population	36
3.4 Sample and Sampling Procedure.....	37
3.5 Research Instruments	38
3.5.1 Questionnaire for Health Care Providers.....	38
3.6 Validity and Reliability Research Instruments.....	39
3.6.1 Validity	39
3.6.2 Reliability	39
3.7 Data Collection Procedures	40
3.8 Data Processing and analysis	40
3.8.1 Pearson Correlation	41
3.8.2 Multiple Regression Analysis.....	41
3.8.3 Model Specification.....	41
3.9 Diagnostic Tests	42

3.9.1 Multicollinearity	42
3.9.2 Homoscedasti.....	42
3.9.3 Normality.....	42
CHAPTER FOUR.....	43
DATA ANALYSIS, FINDINGS AND DISCUSSIONS	43
4.1 Introduction	43
4.2 Demographic Characteristics of Respondents.....	43
4.2.1 Gender of Respondents.....	43
4.2.2 Age of Respondents.....	44
4.2.3 Highest Academic Qualification of Respondents.....	45
4.2.4 Working Experience of Respondents	45
4.2.5 Job Designation of Respondents.....	46
4.3 Customer Focus in Healthcare Sector	45
4.4 Continuous Quality Improvement in Healthcare Sector	46
4.5 Employee Involvement in Healthcare Sector.....	47
4.6 Management Support in Healthcare Sector.....	48
4.7 Diagnostic tests	50
4.4.1 Multicollinearity Test	50
4.4.2 Test for Heteroscedasti	51
4.4.3 Normality Test.....	52
4.7 Inferential Statistics.....	53
4.7.1 Correlation Analysis	53
4.7.2 Multinomial Regression Analysis	54
CHAPTER FIVE	56
SUMMARY, CONCLUSIONS AND RECOMMENDATIONS	56
5.1 Introduction	56
5.2 Summary	56
5.2.1 Customer Focus in Healthcare Sector	56
5.2.2 Continuous Quality Improvement in Healthcare Sector.....	57
5.2.3 Employee Involvement in Healthcare Sector	57

5.2.4 Management Support in Healthcare Sector	58
5.3 Conclusions	59
5.4 Recommendations	59
REFERENCES.....	60
APPENDICES.....	70
Appendix A: Consent Letter	70
Appendix B: Questionnaire for Health Care Staff	73

LIST OF TABLES

Table 1: Operationalization of Variables	35
Table 2: Target Population.....	37
Table 3: Sample Size Distribution	38
Table 4: Reliability Test.....	40
Table 5: Gender of Respondents.....	44
Table 6: Age of Respondent	44
Table 7: Highest Academic Qualification.....	45
Table 8: Working Experience	46
Table 9: Job Designation	47
Table 10: Customer Focus	45
Table 11: Continuous Quality Improvement	46
Table 12: Employee Involvement in Healthcare Sector	47
Table 13: Management Support in Healthcare Sector	49
Table 14: Multicollinearity Test Using Tolerance and VIF.....	50
Table 15: Heteroscedasti Results	51
Table 16: Normality Outputs	52
Table 17: Bivariate Correlation Analysis	53
Table 18: Model Fitting Information	54
Table 19: Pseudo R-Square.....	54
Table 20: Likelihood Ratio Tests.....	55

LIST OF FIGURES

Figure 1: Conceptual Framework	34
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ACRONYMS AND ABBREVIATIONS

ANC: Antenatal Care

CQI: Continuous quality improvement

NGOs: Non-Government Organization

NHIF: National Health Insurance Fund

PICs: Pacific Island Countries

QI: Quality Improvement

SERVQUAL: Service Quality

TL: Transformational leadership

TQM: Total Quality Management

WHO: World Health Organization

OPERATIONAL DEFINITION OF TERMS

Continuous quality improvement: These are interventions aimed at unifying the service delivery process to guarantee that patients receive services in a timely and efficient manner.

Customer focus: entails initiatives aimed at ensuring that customer expectations and demands are met.

Employee involvement: Employee involvements encompasses the process of ensuring employees participate in decisions when it comes to planning, implementation and monitoring and evaluation

Management support: the managerial uses of information resources.

Total Quality Management: as a culture maintained by an organization whose main aim is to enhance customer satisfaction and continuously improve quality of services to meet and exceed customer expectations and desires.

CHAPTER ONE

INTRODUCTION

1.1 Background to the Study

With rapid increase in human population and advancement in technology, new markets have opened up, and hospitals have been forced to keep up with the current trend of growth to ensure they satisfy their clients' needs. Similarly, increased demand for quality healthcare services continue to exert pressure on the available health care resources and this has contributed to increased desire for a health care sector that addresses the basic and most urgent health needs of patients. As such, organizations are called upon to invent unique competitive strategies as well as provide products and services that continuously and effectively meet, satisfy, and surpass the clients' desires (Balasubmaranian, 2016). The concept of TQM has emerged as one of the strategies of improving efficiency and quality of service delivery in health care facilities.

Globally, there are a number of studies which have been done in relation to the subject of TQM and service delivery. In his study, Al-Shdaifat (2015) identified customer focus and continuous improvement as the main TQM dimension used 70% of hospitals while a study by Alaraki (2014) revealed that TQM practices were linked to hospital leadership, staff management, information analysis, employee training, customer orientation, continuous service improvement, process management, and supplier management) and hospital performance.

In Sub-Saharan Africa, available studies on the subject show mixed results. In Mauritius, a study by Ramseook-Munhurrin, Munhurrin and Panchoo (2011) found that the main TQM practices in public hospitals were employee team work, training, involvement and customer oriented service delivery as well as effective leadership contributed to management and employees perception while in Nigeria, a study by Ogbeide and Ejechi (2016) revealed that the main TQM

practices were leadership commitment, staff participation and employee education and training as well as customer's satisfaction.

In East Africa, studies show that TQM contributed to the performance of various sectors. A study by Alzoubi, *et al.*, (2019) explored impact of TQM in healthcare sector in Tanzania and established that there are five core predictors of TQM in health-care context including; team work, customer focus, continuous quality improvement, management commitment as well as education and training. The five core predictors were found to have an association with improved health service delivery.

In Kenya, a study by Mohamed (2015) evaluated the effects of TQM practices on operational performance of private health sector in Kenya and established that TQM Practices of customer orientation, management commitment, and employee empowerment and supplier partnership promoted operational performance of private hospitals in Nairobi County thereby contributing to improved service delivery.

1.1.1 Total Quality Management

Like in many organizations, the healthcare care sector cannot negate the aspect of Total Quality Management as an important aspect of enhancing client satisfaction and delivery of quality services. Total Quality Management (TQM) is defined by Al Manhawy (2013) as a culture maintained by an organization whose main aim is to enhance customer satisfaction and continuously improve quality of services to meet and exceed customer expectations and desires. On the other hand, Ngambi and Nkemkiafu (2015) views TQM in terms of quality of goods and services provided by an organization customers or clients in cost-effective manner.

The concept of TQM also involves identifying and mitigating errors at each stage of service delivery (Ngambi & Nkemkiafu, 2015). This means that every employee in all levels of

management from corporate level, functional level and business level has a role to play in TQM process. Team work, coordination and collaboration through TQM promote improved quality of service delivery, high customer loyalty, strong customer relationships, excellent employee performance and improved competitive advantage of an organization. Implementation of Total Quality Management makes top leaders in an organization to learn and incorporate new strategies, approaches and practices for better organizational performance (Ngambi & Nkemkiafu, 2015). It is expected of all managers and top management to engage and involve employees in TQM process through sensitization of employees on business philosophy of the organization, motivation staff to build culture of innovation, strengthening customer relationships, adopting effective human resource management practices and creating effective mechanisms of communication and feedback (Ngambi & Nkemkiafu, 2015).

1.1.2 Quality of Service Delivery

Globally, the desire to provide quality services to customers has become a priority of managers in different organizations. In healthcare sector, emphasis on provision of quality services led to the development of quality dimensions by the World Health Organization [WHO] (2006) to act as measurement for quality service provisions in all level of healthcare delivery. According to WHO (2006), quality of care should be determined by the extent to which provision of healthcare services to a population improve their desired outcome in terms of equitability, safety, efficiency and effectiveness (WHO, 2006). Provision of quality healthcare services should follow the delivery of appropriate care/service, timeliness while addressing to patient needs, cost effectiveness and reducing patient harm (WHO, 2018). Quality of health care services should improve patient desired health outcomes, promote safety, enhance patient focus and orientation

and improve timeliness, effectiveness, efficiency and improved coordination of health care services (WHO, 2018).

The past few decades has seen global demand for quality health care due to increased population and demand (Makanyeza *et al.*, 2013). However, many countries are struggling to offer quality health care services to its citizens and this is contributed by lack of enough skilled personnel, low budget and poor management of health resources (Oleribe *et al.*, 2019). In Kenya, the healthcare sector is faced with numerous challenges which have affected effective delivery of quality services. The Auditor General Report (2019) showed that healthcare institutions in Kenya are faced with challenges of corruption and other malpractices resulting in embezzlement of funding meant for purchase of essential medical commodities and supplies. Further, the Auditor's report indicated that achieving quality of service delivery in hospitals is impeded by nepotism, deficient and dilapidated infrastructure, unreliable medical personnel, poor staffing and questionable internal control systems. As a result of these challenges, Kenyans risk poor quality of service delivery, mistrust, high mortality and reduced life expectancy (WHO, 2015).

1.1.3 Healthcare Sector in Kenya

Healthcare sector is one of the most important sectors of the economy in Kenya. The sector is divided in three categories which include; public sector, commercial private sector and Faith Based Organization sector. The public sector is the largest among the three and is controlled and financed by the government. The public healthcare sector involves different levels of health delivery through community healthcare systems, dispensaries, health centers, hospitals and referral hospitals. Commercial private sector comprises healthcare facilities owned by private individuals whose aim is to make profit. Besides, FBO sector involves organizations and facilities which

provide healthcare services not for profit but help the poor, marginalized groups and inadequately served populations to access healthcare services (Kenya Healthcare Federation, 2016).

Kenya's healthcare sector has grown tremendously over a couple of past few years. While Kenya's budget towards healthcare sector remains below the recommended 15% of the total GDP by the WHO, the Kenyan government spends 6% of GDP on health. This is low compared to healthcare expenditure in other regions globally. The money for financing the healthcare sectors comes from different sources such as taxation, remissions through National Health Insurance (NHIF), personal health insurance cover, user fees during inpatient or outpatient services, employer health schemes, donations or grants from local or international partners, NGOs and Community Based Health Financing Schemes. It is estimated that 25% of the Kenyan population are covered under private, public and community –based health insurance schemes. However, the user fee Kenyans spend to access healthcare services remains high and this contributes to increased burden thereby affecting access to quality of healthcare services (Kenya Healthcare Federation, 2016).

The Kenya Health Workforce Report (2015) clearly shows the disparities in healthcare sector which impede access to quality services. While WHO recommends 1 nurse per 400 people, in Kenya the nurse-patient ratio is 8.3 nurses per 10,000 populations (Kenya Health Workforce Report, 2015). According to Kenya National Bureau of Statistics (2019), the total number of health care workforce is 274,347 comprising of 28,315 doctors, 33,748 dentist and pharmacists, 170,159 clinical officers, nurses and physiotherapists as well as 47,125 laboratory technicians, radiologists and anesthetist. This is against the WHO recommended minimum staffing level of 36 doctors per 10,000 population. Such disparities are a point of concern since they are likely to hinder smooth provision of quality of healthcare services and if nothing is done, the health and wellbeing of the

Kenyan population will be at risk. This study sought to address this problem by examining the effects of Total Quality Management Practices on quality services in health sector in Nairobi County.

1.2 Statement of the Problem

Poor healthcare services can negatively affect not just the wellbeing of patients but also can lead to inaccurate diagnosis, drug errors, inappropriate treatment, unsafe clinical practices and even death. If left unchecked, this issue can expand and create unhealthy population. As Dangmei, and Singh (2019) claims, the problem of poor healthcare services is caused by poor staff involvement, inadequate infrastructure and retrogressive cultural practices and employee burnouts. Amporfu, et al. (2013) links the problem of poor-quality services to lack of employee involvement in decision making while Angee (2013) claims that lack of enough equipment, high doctor/nurse ration, poor working condition and low healthcare budget

In Kenya, rapid population growth and increased demand for quality services has exerted pressure on Kenya's health care system and this is likely to affect the wellbeing of the general population. While data shows that Kenya's population increased by nine million people in the last ten years from 38.6 million people in 2009 to 47.6 million in 2019 (National Centre for Population Growth Report, 2020), little efforts have been made to develop a health care infrastructure that can meet the salient needs of the population.

In Kenya, like other developing countries, the healthcare sector has undergone through various reforms to promote easy access and delivery of quality services in the society. Kenya devolved healthcare delivery to 47 Counties in the year 2010 following the enactment of new constitution. Devolution which is a form of decentralization of health involves devolving power and resources from the national or central governments to locally or regionally units in order to

promote access and timely response to health needs of a population (Foley, 2013). Decentralization of healthcare services in Kenya was anchored in the need to improve effectiveness and efficiency of healthcare services through community involvement and participation. However, while the strategy of devolution of healthcare in Kenya has yielded substantial benefits, it has also presented a number of challenges which needs to be addressed in order for Kenya to realize its short-term and long-term health goals (Foley, 2013).

In Kenya, devolution of health care to the County governments is faced with challenges such as; recurrent industrial unrest by health care workers over unpaid wages and poor terms of service, lack of proper legal framework to implement devolved health services as well as lack of appropriate health care infrastructure including drugs and equipment. Such challenges have forced many Kenyans to seek alternative means of health care which is either too costly or unsatisfactory (Foley, 2013). It is in effort to find solution to these challenges that this study examined the effects of Total Quality Management practices on quality services in healthcare sector using the case of Nairobi County.

1.3 Research Objectives

1.3.1 General Objective

The main aim of this study was to investigate the effects of Total Quality Management (TQM) practices on quality services in health sector in Nairobi County.

1.3.2 Specific Objectives

This study was guided by the following specific objectives:

- 1) To examine the effects of customer focus on quality-of-service delivery in health sector in Nairobi County.

- 2) To explore the influence of continuous quality improvement on quality-of-service delivery in health sector in Nairobi County.
- 3) To evaluate the influence of employee involvement on quality-of-service delivery in health sector in Nairobi County.
- 4) To assess the influence of management support on quality-of-service delivery in health sector in Nairobi County.

1.4 Research Questions

The study was guided by the following research questions:

1. How does customer focus influence quality of service delivery in healthcare sector in Nairobi County?
2. How does continuous quality improvement influence quality of service delivery in healthcare sector in Nairobi County?
3. How does employee involvement influence quality of service delivery in healthcare sector in Nairobi County?
4. How does management support influence quality of service delivery in healthcare sector in Nairobi County?

1.5 Justification of the Study

It is without a doubt that the subject on Total Quality Management and quality of service delivery has received very little attention in the health sector. TQM has been widely utilized in manufacturing and other service industries, and it's highly evidenced through the strides the industries in the sector have made in satisfying their clients' needs. With its long-proven record of success in manufacturing and other service industries, TQM has been underutilized in health care sector. Many of available studies concentrate on adoption of TQM in manufacturing industries and

service industries leaving a big gap in the healthcare sector which is one of the most important sectors of any economy. The concept of TQM in the health sector is mainly based on quality certification and accreditation. This study will go a long way in providing relevant information that will help the health sector, both Public and Private to embrace TQM to help them enhance client satisfaction.

1.6 Scope of the Study

This study focused on effects of Total Quality Management practices on quality service delivery in healthcare sector in Nairobi County. This study targets all healthcare providers drawn from private and public health care facilities in Nairobi County.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter describes theoretical framework and empirical literature relating to the effects of Total Quality Management (TQM) practices on quality service delivery. The main theories discussed are Gap theory and SERVQUAL model. Besides, the chapter reviews empirical studies in relation to the subject under study. The review adopts a thematic approach and the main themes covered are: customer focus, continuous quality improvement, employee involvement and management support.

2.2 Theoretical Review

Theoretical framework involves ideas or a set of prepositions which are based on theories. The following theories have been chosen to support the service delivery area of study, since no one theory can explain all the concepts in totality. The theories or model chosen include; Customer Focus Theory, Gap theory and SERVQUAL model.

2.2.1 Customer Focus Theory

Customer Focus Theory originated from the work of Drucker (1954) and was later advanced by Mohr-Jackson (1991), Gulati and Oldroyd (2005), Kumar *et al.*, (2008), and Sousa (2003). The theory posits that customer focused services should be the overall strategic objective of any organization since the customer determines an organization's existence. Thus, organizations should strive to ensure that customer desires, needs and expectations are fulfilled and this will promote the success of an organization (Baldrige 2010; Day 2003, Mugo, 2020).

Customer focused and orientated services define an organization's competitive advantage since customers can associate themselves with the organization. Different studies use various

indicators to measure customer focus that include knowledge of the customer, their requirements and their current and future needs such as customer relationships, customer involvement, customer knowledge, and customer feedback (Sousa, 2003). Gulati (2007) found that coordination, cooperation, capability development and connection with the customer lead to customer focus. Kumar *et al.* (2008) found that a customer focused sales campaign significantly increased profits and return on investment. A study by Yaacob (2014) sought to find the effects of customer focused services on performance of public firms using descriptive research design and revealed that customer focused services created employee and customer satisfaction as well as promoted culture of innovation in the public sector.

Customer Focus Theory is relevant in this study because it explains the relationship between customer-centered services and quality of service delivery. However, Customer Focus theory is limited since it assumes that focusing on customers will always result in customer satisfaction and negate the fact that customers may have different perceptions on what constitutes quality. In hospital set-up, employees may do their best to meet patients' needs but if the medical bill is beyond expectations of the patient, then the patient may use medical expense to quantify quality of service.

2.2.2 GAP Theory

GAP theory was proposed by Parasuraman *et al.*, (1985) and describes five major gaps organization must address in order to improve customer satisfaction. In GAP Theory, service quality and customer satisfactions depend on the views and perception of a customer. In other words, if a patient thinks that a particular service will help meet his/her desires, then it can be said that the patient is satisfied. Similarly, if a patient perceives that a particular service has not met intended need, then the customer can be said to be dissatisfied (Parasuraman *et al.*, 1985).

According to Parasuraman *et al*, (1985), there are five gaps that determine quality of service and customer satisfaction. The first gap is called knowledge gap. This kind of gap occurs when there is disconnect between customer expectations and service provider. In other words, knowledge gap arises in scenarios where the service provider does not understand the expectations and desires of a customer. Knowledge gap is contributed by poor organizational-customer interaction, ineffective communication channels, lack of customer orientation and focus, lack of market research and ineffective customer feedback systems (Parasuraman *et al*, 1985). The second gap is called Policy Gap. This kind of gap involves a misunderstanding on the part of an organization on how to align service delivery policies and standards to meet customer needs. Policy Gap may be contributed by unclear customer service standards and failure to revise service standards to meet customer needs (Parasuraman *et al*, 1985).

The third gap is called Delivery Gap. This kind of gap occurs when actual delivery of services is a deviation from established service delivery policies and standards of an entity. This is often as a result of inadequate human resource policies, insufficient employee information about a product, lack of teamwork and mismatch between supply and demand (Parasuraman *et al*, 1985). The fourth gap is called Communication Gap. This gap arises when there is a mismatch between what is promised to customers through advertisements and what is actually delivered to customers. Such circumstances may occur when an entity overpromises and has poor communication strategies (Parasuraman *et al*, 1985). The fifth gap is called Customer Gap. This gap occurs when customer expectations vary from customer perceptions thereby causing the customer to misinterpret the services offered thereby leading to dissatisfaction (Parasuraman *et al*, 1985).

GAP theory is relevant because it helps organizations to identify, analyzed and understands gaps that affect service delivery and this helps to develop measures to reduce the gaps and improve

quality of service delivery (Channon & Sammut-Bonnici, 2015). GAP theory is also important because it is relatively simple to use and outlines steps and organization can take to address gaps which affect quality of services thereby promoting customer satisfaction (Mauri, Minazzi & Muccio, 2013).

2.2.3 SERVQUAL Model

SERVQUAL model is service delivery framework which was developed in mid-1980 and later advanced by Lim and Tang (2000) to measure the scale of quality in service sectors. SERVQUAL model describes 10 dimensions which organizations should use to measure the differentiation between customer expectations and actual service delivery. The organization should determine whether a service delivery instrument or tool is reliable, whether personnel respond to customers in a timely manner, whether the personnel providing the service are competent, whether the service provided is accessible, whether the service provider communicates effectively, whether the personnel are courteous, whether the service is credible, whether the service is secure, whether the service provider understand the customer and whether the service is tangle (Parasuraman *et al*, 1985).

Mirinda *et al*. (2010) used SERVQUAL model to study the differences in understanding between health professionals and clients and determined that SERVQUAL model was effective in explaining quality of service and client satisfaction. In another study, Youseff (1996) applied SERVQUAL to determine service quality UK hospitals and revealed that reliability was the most significant factor affecting customer perceptions and expectations towards different services. In addition, the study revealed that empathy, responsiveness and assurance were important SERVQUAL dimensions of determining service quality in the healthcare sector.

2.3.4 Leadership Participation Model

Sinha (1995) introduced the Leader Participation Model, which states that participative leaders share power with group members and allow members to participate in decision-making (Sinha, 1995). Participative leaders believe in the abilities of the group's members, recognize the importance of building support in order to minimize opposition, avoid blame in the event of failure, and frequently exchange roles and tasks (Sinha, 1995).

The Leader Participation Model is normative in nature, defining a set of principles for determining the type and extent of participatory decision making in various scenarios. The model consists of a complex decision tree with seven possibilities whose importance can be determined by responding "Yes" or "No" questions based on leadership styles. Furthermore, the model proposes that leadership research should be focused on the situation rather than the leader. Because leader behavior varies based on the circumstance and a leader can modify his or her style to different settings, it is generally more sensible to talk about participative and autocratic situations rather than leaders who possess these traits.

Leader participation model is relevant because it demonstrates the importance of involving key stakeholders in decision and this is likely to build ownership, morale and motivation. However, the model is limited because it may encumber timely decision-making since participative managers want each team member to weigh in on the situation and this is likely to give rise to delay. The model also may result in conflict and diminished quality of professional expertise.

2.3 Empirical Review

This section discusses the empirical studies related to the subject of Total Quality Management (TQM) and service delivery. The review adopts a thematic approach and the main themes discussed include; customer focus, quality service improvement, staff involvement and management commitment and support.

2.3.1 Customer Focus and Quality of Service Delivery

There are various studies which have been done in relation to the subject of customer focus and service delivery. In Malaysia, Yaacob (2014) examined the effects of customer focused services on performance of public firms and found customer focused services created employee and customer satisfaction as well as promoted culture of innovation in the public sector. A similar study in Malaysia by Yaacob (2014) examined the effect of quality improvement on customer satisfaction in the public sector and concluded that commitment of leaders, customer orientation and continuous quality improvement of services improved customer satisfaction.

In Pakistan, a study by Ullah, Ajmal and Aslam (2016) investigated the role of quality improvement practices on performance of organizations and concluded that that customer focused services enabled the organization to meet expectations of customers thereby resulting in improved performance of the organization. In Italy, a study by Bruno, Dell'Aversana and Zunino (2017) evaluated the role of customer orientation services and management in healthcare sector and found that customer orientation approach created desire by personnel to help customers meet their needs thereby improving customization of services.

In Switzerland, Gebauer and Kowalkowski (2012) investigated the impact of customized services and concluded that personalization of services improved resource flexibility for delivery services thereby enhancing profitability and competitive advantage of the organization. In China,

Cai (2009), a research by investigated the link between customer focused services and organization performance and found that customer-oriented services helped strengthen customer relationships which in turn led to improved production performance and customer satisfaction.

In Turkey, a study conducted by Tekin and Erol (2017) used descriptive design to study the effects of customer focused services in healthcare systems and concluded that customer orientation helped in improving appointment scheduling and reducing treatment at the facility. In Taiwan, a study by Yi-Wen and Edward (2010) examined the role of customer focused services on profitability of organization and concluded that customer focused services improved the process and suitability of service provision thereby promoting financial performance of companies.

In Netherlands, Kuipers, Cramm and Nieboer (2019) applied cross-sectional survey design to examine the role of patient centered services on client satisfaction and concluded that patient-centered services were helped in promoting social and physical well-being of clients thereby promoting customer satisfaction. In Nigeria, a study by Olowokudejo and Adeleke (2011) evaluated the association between customer-oriented services and customer satisfaction and conclude that customer-oriented services promoted customer satisfaction as a result of improved motivation and commitment by the staff

In Ghana, Attakora-Amaniampong, Salakpi and Bonye (2014) employed descriptive survey design to study the effect of customer focus on construction firms and concluded that TQM practices had no effect on customer satisfaction. In Ethiopia, Bogale, Beharu, Tesfaye and Belay (2017) studied the impact of patient-centered practices in public hospitals and concluded that patient-focused service delivery practices contributed to improved quality care, fostered partnerships and sharing of information as well as patient involvement and understanding patient preference.

In Tanzania, Larson, *et al.*, (2015) examined the impact of patient-centered care in hospitals and concluded that patient-focused service practice was important in improving quality of services, hygiene and sanitation and effective information delivery between patients and healthcare providers. In Kenya, a study by Kangethe (2015) examined the role of customer focused practices on operational performances of government entities and concluded that customer focused practices resulted in improved operational performance, workforce participation, effective complaint and feedback system, reduction in costs, improved revenue generation, efficient delivery of services and customer satisfaction.

Customer focus entails initiatives aimed at ensuring that customer expectations and demands are met. According to Al-Shdaifat (2015), healthcare practitioners should provide services in such a way that patients' interests and expectations are met. Patients' health outcomes are expected to improve as a result of patient-centered care. Patients are more likely to gain self-efficacy through customer orientation, according to Oh and Wee (2016), which can contribute to profitability and high-quality services in public hospitals. Oh and Wee (2016) go on to say that the importance of offering patient-centered care creates the necessary synergy for positive change and improved wellbeing of patients.

Customer focus is also seen as a component of better service delivery. According to Han, *et al.*, (2018), healthcare professionals will have improved psychological wellbeing as a result of emotional labor management, which will lead to increased motivation, morale, and productivity, resulting in improved service delivery among employees. Customer focus, according to Aburayya *et al.* (2020), is an important component in promoting patient satisfaction, loyalty, and quality.

Customer orientation leads to customer satisfaction in the public sector, according to Li *et al.* (2019). They contend that public institutions have an in-built consumer base, and that

employees' interactions with customers typically impact customers' behavior, attitudes, and actions. As a result, governmental institutions charged with delivering critical services should adhere to customer-oriented methods in order to suit customers' desires and wants. Customer focus is also critical in promoting customer safety and well-being.

Customer focus techniques, according to Weng et al., (2016), directly improve patient safety, coordination, and nursing care in the healthcare sector. Furthermore, according to Rod and Ashill (2015), client orientation is critical in preventing burnout among healthcare personnel. Take, et al., (2015), on the other hand, claims that customer orientation in hospitals reduces patient waiting times and improves staff motivation and service quality. The importance of a customer-centric approach to business growth cannot be overstated. According to Neneh (2019), entrepreneurs who practice customer orientation are more likely to appeal to customers, and customers feel recognized and valued as a result of interactions. Customers are more inclined to be loyal, which boosts small business profitability and performance. Mwikali and Bett (2019) believe, on the other hand, that using the customer focus dimension allows healthcare personnel to meet a wide range of patient requirements and desires. Customer focus also encourages all employees, from top management to lower-level employees, to work together to provide high-quality service.

Customer-oriented service, according to Latyshova et al., (2015), includes staff involvement, effective communication, the loyalty index, and the alignment of business operations to fulfill the needs and expectations of customers. According to Wuyts, et al., (2015), customer-focused services lead to improved levels of customer need fulfillment, but this benefit is contingent on their ability to serve end customers. When clients and providers have deep relational ties, clients

have a high level of customer focus, and end customer needs are steady, customer-focused enables for effective fulfillment of customer wants (Wuyts, et al., 2015).

2.3.2 Continuous Quality Improvement and Quality of Service Delivery

In the United Kingdom, Hill *et al.*, (2020) conducted a systematic review to examine the role of continuous quality improvement on health care outcomes and concluded continuous quality improvement helped to identify gaps and create mechanism of addressing them thereby enhancing cost-effectiveness of service delivery in healthcare facilities. In India, a study by Nazar, et al., (2018) examined the effect of Total Quality Management (TQM) on performance of organizations and concludes that CQI helped in identifying service delivery gaps and this led to creation of interventions to address the gaps thereby results in organizational performance.

In Brazil, Lizarelli, Toledo and Alliprandini (2019) evaluate the effect of continuous improvement on innovation among manufacturing companies and found that continuous improvement nurtured creativity and innovation which were vital in promoting performance of manufacturing companies in the country. A similar study in Brazil by Tortorella, *et al.*, (2020) examined the impact of TQM on operational performance of manufacturers using cross-sectional descriptive design targeting 135 companies. Data was collected using questionnaires and analyzed through multivariate regression techniques. The findings revealed that TQM promoted improvement of learning capabilities and this significantly resulted in improved performance of the companies.

In Pakistan, Rehman and Husnain (2018) studied the effect of quality improvement elements on patient satisfaction in the private health sector and concluded that quality improvement elements helped in improving healthcare infrastructure in terms of premises, tools

and instruments and workforce presentations as well as enhanced comprehensive provision of care to patients without discrimination thereby promoting quality care and customer satisfaction.

In Jordan, a study by Ahmad, et al., (2012) examined the role of quality improvement interventions on patient satisfaction in healthcare sector and found that quality improvement helped to strengthen systems of healthcare delivery thereby improving patient satisfaction. In Nigeria, Oyeledun, *et al.*, (2017) studied the effect of continuous quality improvement intervention on retention-in-care at 6 months postpartum in a pmtct program and found that CQI promoted retention of patients in care, honoring of clinic appointment and adherence to treatment plan thereby resulting in improved patient satisfaction.

In South Africa, Yapa, *et al.*, (2020) sought to determine the influence CQI on standard of Antenatal Care (ANC) and concluded that CQI was important in viral load tracking and in increasing quality of services. In Ghana, a study by Atinga, Abekah-Nkrumah and Domfeh (2011) examined the impact of quality health care management in hospitals and revealed that quality of care management helped in creating conducive environment and facilities which were responsive to customer expectations and needs thereby improving patient satisfaction.

In Rwanda, a study by Ndagijimana, *et al.*, (2019) examined the impact of quality and safety management in public hospitals and concluded that quality of services in public hospitals was affected by adverse drug reactions, treatment defaulters and surgical site infections as well as long-consultation time and inadequate health personnel. In Ethiopia, Magge, *et al.*, (2019) studied the impact of national Quality Improvement (QI) on service delivery in public hospitals and concluded that QI teams were essential in tracking service delivery gaps thereby contributing in improved delivery of quality services in public hospitals.

In Uganda, Tibeihaho, *et al.*, (2021) examined the role of continuous quality improvement on performance of healthcare facilities and found that implementation of quality improvement interventions resulted in reduction of costs and improvement of provider experience as well as patient experience and outcomes. In Tanzania, Yusuke, *et al.*, (2017) conducted a cluster-randomized trial to determine the impact of continuous quality improvement methods in hospitals and concluded that CQI interventions contributed to improvement in hygiene and sanitation and reduction in patient waiting time thereby leading to overall patient satisfaction.

In Kenya, a study by Otieno (2016) examined the relationship between continuous improvement practices and organization efficiency and concluded that continuous improvement practices cut down costs, improved customer safety and enhanced efficient delivery of patient-centered services. Another study by Ngambi and Nkemkiafu (2015) investigated the impact of Total Quality Management (TQM) on organizational performance. The study used descriptive research design and questionnaires to collect data. Descriptive statistics such as mean, frequencies and percentages were used in data analysis. The study established that employment training and empowerment had a significant impact on financial performance while corporate social responsibility, leadership commitment, quality control and inspection were found to have a significant impact on cost reduction. However, the study established that none of the TQM practices had a significant effect on customer satisfaction.

These are interventions aimed at unifying the service delivery process to guarantee that patients receive services in a timely and efficient manner. According to Shahbod *et al.*, (2017), integrating healthcare systems is critical for improving service quality. Integration of services improves communication, collaboration, and patient wait times. According to Liang (2019), implementing an effective quality improvement system in healthcare systems decreases costs,

delays, and promotes case management and interdisciplinary interventions, all of which improve patient satisfaction and service quality.

Quality improvement is successful in resolving complicated health issues and improving patient outcomes. According to Nyatanyi et al., (2017), an integrated healthcare system provides a platform for collaboration and sharing of knowledge, experiences, and common goals, all of which are critical for any institution's success. In the healthcare sector, an integrated healthcare system encourages effective communication, evidence-based interventions, increased surveillance, and reduced patient waiting times and costs (Nyatanyi, et al., 2008). (2017). Furthermore, Selamu, et al. (2019) suggests that an integrated healthcare system is critical in minimizing burnout symptoms such as depression, job uncertainty, and stress.

Quality improvement in the healthcare industry has encouraged participation from all levels of management. According to Wanjala, et al., (2018), integrated healthcare systems facilitate data collection and flow, which is critical in fostering evidence-based decision-making in the healthcare sector. It is critical for healthcare personnel to communicate and exchange information about their daily operations while maintaining safety and confidentiality.

Continuous quality improvement in hospitals has an impact on patient health outcomes and well-being, according to Ngantcha et al. (2017). They argued that hospital processes could be assessed for completeness, record quality, and early detection of patient needs by examination. According to Sandra et al., (2015), the quality service delivery in hospitals should adhere to clearly documented protocols and expectations for health professionals, which should be supported by education, mechanisms to audit and provide feedback on behaviors and performance, and the ability to hold participating health professionals accountable.

The manner in which healthcare providers serve patients in hospitals has a direct bearing on attitudes and views. According to Sobczak, et al., (2018), health care workers' conduct and communication style influence patients' attitudes toward treatment and influence their decision to enroll in treatment. According to Fong, et al., (2010), the doctor-patient communication process is at the heart of medical practice, and medical practitioners should seek to improve patient communication in order to provide high-quality health care. The analysis also found that the breakdown of the doctor-patient connection was the top cause of patient dissatisfaction with health-care services. Labaf, et al., (2015), on the other hand, claim that standard operating procedures for speaking with and interacting with patients foster courage and confidence, which leads to patient satisfaction with services.

The nature of information provided by healthcare providers can also shape a hospital's process strategy. According to Sarafis et al. (2014), customer satisfaction is improved by presenting accurate information, providing hope, and respecting patient autonomy. Furthermore, according to Ishijima, et al., (2016), a hospital's process approach is defined by the procedures taken to supply certain services. They contend that patient wait times have an impact on service quality.

2.3.3 Employee Involvement and Quality of Service Delivery

In Netherlands, a study by Mu, Bossink and Vinig (2018) examined the role of employee involvement in promoting service delivery in healthcare setting and found that employee involvement enhanced communication, commitment and team cohesion which were vital in promoting quality service provision. In India, Dangmei and Singh (2018) studied the role of employee engagement in quality care provision and concluded that staff participation improved

staff commitment, autonomy, productivity and innovation thereby enhancing quality of care in India hospitals.

In the United States of America, a study by Phipps, Prieto and Ndinguri (2013) investigated the impact employee involvement on organizational productivity and concluded that employee involvement influenced productivity through efforts such power delegation, information delivery, knowledge/skills and rewards and recognition promoted productivity and overall performance of organization. In Canada, Lowe (2012) evaluated the role employee involvements in hospitals and found that employee involvement helped in improving staff commitment, communication and teamwork thereby promoting productivity and quality delivery of care.

In Cuba, a study by Asante, *et al.*, (2012) analyzed the effect of involving Cuban Doctors in provision of health services in Pacific Island Countries (PICs) and concluded that involvement of Cuban doctors boosted health service delivery and was cost-effective when compared with the option of training doctors in those countries. In Nigeria, Amah and Ahiauzu (2013) assessed the impact of employee involvement in organizations and concluded that employee involvement promoted morale of employees thereby leading to productivity, effectiveness and innovation.

In South Africa, a study by Beukes and Botha (2013) examined the impact of involving nurses in implementation and management of services in healthcare facilities and concluded that involving nurses promoted work commitment, improved their morale and contributed to overall performance of the facilities. In Zambia, a study by Mutale, *et al.*, (2013) examined the source of healthcare worker's motivation in rural health facilities and concluded that employee motivation through on-job training sessions helped to motivate employees making them to be committed and deliver timely and as such contribution to quality of services.

In Rwanda, a study by Ndikumana, Tubey and Kwonyike (2019) focused on the impact of employee involvement in public hospitals and concluded that employee involvement promoted effective decision making as well as staff loyalty and retention public district hospitals. In Uganda, a study by Sendawula, Kimuli, Juma and Muganga (2018) studied the relationship between employee training and employee engagement on employee performance in healthcare sector and concluded that workforce engagement through training enhanced commitment thereby leading to improved productivity and performance of healthcare sector.

In Kenya, Mildred (2016) studied the effect employee involvement and job performance in *KEMRI* in Kisumu County and concluded that employee involvement through capa building programs helped employees to understand the goals and objectives of the goals and this helped to renew their commitment, team spirit and motivation towards delivery of quality services.

Employee involvements encompasses the process of ensuring employees participate in decisions when it comes to planning, implementation and monitoring and evaluation. Mu, et al., (2018) argues that role of employee involvement in promoting service delivery in healthcare setting and found that employee involvement enhanced communication, commitment and team cohesion which were vital in promoting quality service provision. Dangmei and Singh (2018) observe that staff participation promotes improved staff commitment, autonomy, productivity and innovation thereby enhancing quality of care in India hospitals.

According to Phipps, et al., (2013) staff involvement has an impact organizational productivity through efforts such power delegation, information delivery, knowledge/skills and rewards and recognition promoted productivity and overall performance of organization. In Canada, Lowe (2012) evaluated the role employee involvements in hospitals and found that employee involvement helped in improving staff commitment, communication and teamwork

thereby promoting productivity and quality delivery of care. Asante, *et al.*, (2012) analyzed the effect of involving Cuban Doctors in provision of health services in Pacific Island Countries (PICs) and concluded that involvement of Cuban doctors boosted health service delivery and was cost-effective when compared with the option of training doctors in those countries. Besides, Amah and Ahiauzu (2013) assessed the impact of employee involvement in organizations and concluded that employee involvement promoted morale of employees thereby leading to productivity, effectiveness and innovation.

According to Beukes and Botha (2013) revealed that involving nurses promoted work commitment, improved their morale and contributed to overall performance of the facilities. Mutale, *et al.*, (2013) examined the source of healthcare worker's motivation in rural health facilities and concluded that employee motivation through on-job training sessions helped to motivate employees making them to be committed and deliver timely and as such contribution to quality of services. Besides, Ndikumana, Tubey and Kwonyike (2019) focused on the impact of employee involvement in public hospitals and concluded that employee involvement promoted effective decision making as well as staff loyalty and retention public district hospitals. Additionally, Sendawula, *et al.*, (2018) studied the relationship between employee training and employee engagement on employee performance in healthcare sector and concluded that workforce engagement through training enhanced commitment thereby leading to improved productivity and performance of healthcare sector. Mildred (2016) studied employee involvement and job performance in *KEMRI* in Kisumu County and concluded that employee involvement through capa building programs helped employees to understand the goals and objectives of the goals and this helped to renew their commitment, team spirit and motivation towards delivery of quality services.

2.3.4 Management Support and Quality of Service Delivery

In Indonesia, a research by Darma, Susanto, Mulyani and Suprijadi (2018) investigated the role of leadership support in financial accounting information systems and concluded that management support in terms of moral and financial supports contributed to quality of financial accounting information systems. In Pakistan, Javed (2015) investigated the impact of top management commitment on quality management and established that top management commitment and support through serving employees, coaching them and teaching in seminars as well as effective communication and reinforcement of quality improvement contributes to provision of quality services and overall productivity of an organization.

In Vietnam, Nguyen, Phan and Matsui (2017) sought to establish the of quality management practices and found that management support through quality design, collection of quality data, effective reporting and continuous improvement resulted in improved sustainability of performance in organizations. In Indonesia, a study by Handayani, *et al.*, (2015) examined the major determinants of quality service delivery in hospitals and concluded that employee commitment, policy and standard procedures formulations as well as hospital infrastructure were major determinants of service quality in hospitals. In Brazil, a study by Oliveira, Gabriel, Fertoni and Matsuda (2017) examined the impact of hospital management changes and found that leadership changes in form of operational, structural, financial and costing resulted in improvement in quality of health care delivery.

In Pakistan, a research by Khan et al. (2015) investigated the impact of leadership styles on health-care innovation. The study used a descriptive research approach and was based on transformational (human/leader-oriented) and transactional (traits/task-oriented) leadership theories. Data was obtained using descriptive and inferential statistics, including correlation and

regression approaches, on 204 healthcare workers. The findings demonstrated that management support was critical in improving the quality of healthcare services in hospitals and fostering an innovative culture.

In Sweden, Backman, et al (2016) investigated the role of leadership in improving patient-centered care. The goal of the study was to assess if there was a link between managers' leadership behaviors, person-centeredness of care, and the psychosocial climate in elderly care. The data was collected from elderly care workers using a cross-sectional descriptive approach and questionnaires. Descriptive and inferential statistics were used to analyze the data. The findings demonstrated that leadership styles were linked to the person-centeredness of care and the psychosocial climate in a substantial way. The impact of leadership on the psychosocial climate was mitigated by the extent of person-centeredness of care. The study found that managers' leadership behavior had a substantial impact on person-centered care practice and contributed to the psychological climate in elderly care for both employees and residents.

In Australia, Grant, et al., (2017) used a pre-post design to investigate the impact of leadership coaching in an Australian healthcare setting. It included a survey in which respondents were asked to participate in six one-hour coaching sessions led by specialists. Questionnaires were used to collect data, which was then analyzed using descriptive statistics. Participation in leadership coaching improved goal accomplishment, solution-focused thinking, leadership self-efficacy, perspective-taking, self-insight and resilience, and ambiguity tolerance, according to the findings. Stress and anxiety levels were significantly reduced. The advantages of coaching extended beyond the workplace to the home. Many participants said they were able to apply what they learned in coaching to their personal lives, resulting in greater work/life balance, reduced stress, and higher-quality family ties.

In Turkey, Teoman and Ulengin (2018) investigated the impact of managers' transformational leadership (TL) style on a firm's quality performance from the perspective of the supply chain in Turkey. To measure the TL characteristics of managers and their impact on firm quality performance, an online survey of quality-related managers of organizations operating in Turkey was undertaken. The data was analyzed using the Structural Equation Model, and the results demonstrated that the TL management style had a significant and beneficial impact on a firm's supply chain quality performance.

In Saudi Arabia, Alloubani, et al., (2014) sought to study the nature of hospital managers' leadership work in order to evaluate their perspectives of the most important duties, skills, and training courses as hospital managers. The survey also intended to uncover the challenges, roadblocks, and issues that hospital executives face. Data was gathered from the ProQuest, PubMed, and Emerald databases, and the study used a qualitative research approach. The findings demonstrated that transformational leadership qualities and behaviors were positively associated to organizational outcomes such as teamwork success, effectiveness, staff satisfaction, commitment, and extra effort, among other things. Furthermore, transformational leadership procedures were discovered to improve followers' work-oriented values and shape followers' self-efficiency.

In Malaysia, Rahman (2017) did a study that looked at the relationship between transformational leadership and empathy, as well as their impact on the quality of health care services offered to patients. A leadership inventory index (LPI) was utilized to assess personnel, and the Consumer Assessment of Healthcare Providers and Systems (CAHPS) was employed to assess the quality of services offered to patients. There was a substantial association between transformative leaders and empathy, but not between leadership effectiveness and service quality,

according to the findings. Patients were satisfied with the quality of care they received at the hospital, according to the survey.

In Egypt, ElZeeny, et al., (2017) investigated the impact of a clinical supervision training program for nurse managers on the quality of nursing care in intensive care units. The research was carried out in eight intensive care units at New Kasr El Aini Teaching Hospital using a quasi-experimental methodology. Clinical supervision knowledge questionnaire, observational checklist for clinical supervision competence, and quality of nursing care checklist were all used to collect data. The study discovered a statistically significant link between a nurse manager's clinical supervision skills and the quality of patient care provided by staff nurses both immediately after the program and three months afterwards. Three months after the program, there was a statistically significant association between head nurse knowledge and competency scores. The study found that a clinical supervision training program had a beneficial impact on the quality of nursing care provided by staff nurses.

In Zimbabwe, Basera, Mwenje and Ruturi (2020) studied the role of Quality Management (QM) and concluded that ineffective management commitment and support was one of the major causes of poor-quality service delivery in many organizations in Zimbabwe. In Ethiopia, Mohammed, Brahma and Aderaw (2019) investigated the impact of TQM system on operational performance in pharmaceutical manufacturing and found out that management support informs of information delivery and decision making helped to build stronger operational performance of pharmaceutical manufacturing companies.

In Uganda, a study by Musinguzi, *et al.*, (2018) investigated the impact of leadership styles in healthcare facilities and concluded that leadership styles promoted personnel moral and motivation, strengthened team cohesion and improve employee satisfaction thereby leading to

quality of service in healthcare sector. In Tanzania, a study by Shillingi (2017) examined the role of top management in public sector and concluded that top management support was crucial in implementation of strategic plans, mobilization of financial and human resources necessary for provision of quality service in public sector

In Kenya, a study by King'oo, (2017) used descriptive research design to investigate the role of top management support on quality service delivery in Nairobi County and established that top management were essential in communicating and providing strategic direction of the organization which was important in promoting quality of service delivery, improved performance and efficiency as well as maintenance of law and order in the County.

Managers or individuals in positions of leadership are tasked with overseeing the management of hospitals to ensure that patients receive the care they demand while adhering to institutional and regulatory rules. According to Alloubani, et al., (2014), leadership in hospitals must respond to patient challenges, new technologies, and be dynamic in order to promote quality services. The authors also link hospital leadership to successful teamwork, effective service delivery, employee happiness, and dedication. Furthermore, according to Alloubani, et al., (2014), transformational leadership develops work-oriented values and shapes patient self-efficacy.

The management that encourages employees to be more motivated results in higher service quality. According to Durowade et al. (2020), disorderly healthcare services might be caused by a lack of harmony coordinated by inadequate leadership. The author goes on to say that transformational leadership styles increase employee job satisfaction, necessitating the need for healthcare leaders to have leadership skills. The author also suggests that the age of the leader and the length of their tenure be benchmarked in order to improve the quality of healthcare services.

Leadership commitment to the organization's vision provides direction and boosts staff morale. Basera, et al., (2019) adds that effective managers are the ones who are able to harness available resources, talents, and experience for the good of an organization. Lack of effective leadership can stymie growth, resulting in income loss, poor activity implementation, and, ultimately, poor service. Effective leaders, according to Mulenga, et al., (2018), are responsible for delivering fair and cost-effective healthcare services. Because the type of leadership influences employee commitment, contentment, and efficiency, healthcare managers should play a key role in encouraging employees' dedication and work ethic toward delivering high-quality services. Management support is critical in enhancing the performance of health systems. Employee morale, teamwork, and general happiness are all influenced by leadership styles. Effective management styles, according to Musinguzi (2018), stimulate motivation and strengthen teamwork, all of which are required for enhancing service quality.

Vatankhah, et al., (2017) argue that transformational leadership enhances organizational productivity in terms of intellectual capability, stimulation, idealistic influence, inspiring motivation, and personal concerns. While leadership played a crucial role in improving the efficiency of any business, Amerioun et al. (2013) discovered that senior managers' consultative, participatory, and benevolent-authoritative leadership styles did not increase hospital performance.

Management style can promote or lower motivation of employees. Mathole, *et al.*, (2018) revealed that hospital managers who use innovation and entrepreneurial skills to improve quality of care and exercise leadership style which is supportive, friendly, approachable but 'firm' are likely to transform a facility. They further argue that hospital leaders, who conduct regular and supportive supervisory meetings, acknowledge good performers in group meetings make staff feel happy and motivated thereby bolster quality of service. Mathole, *et al.*, (2018) further indicate

that, effective and supportive leadership is demonstrated in terms of dedicated efforts to build teamwork, enhance entrepreneurship and in management systems that are geared to improving process of service delivery. According to Steed (2012), healthcare leaders need a strong combination of personal qualities, learned behaviors, methods, tools, and tactics, which can work as a conduit for improving the effective deployment, widespread adoption, and sustainability of service delivery.

2.4 Research Gap

It is clear from the literature review that majority of the studies measures TQM practices against performance thereby negating a fundamental aspect of quality service delivery. Equally, there is a scar of literature on the subject in the developing countries such as Kenya. The few studies done in third world countries have conceptual and methodological gaps. A number of scholars make serious flaws when they assume that TQM practices are in place and the issue is only on the operational aspects by the concerned.

2.5 Conceptual Framework

Figure 1 shows the conceptual framework portraying the relationship between TQM and quality service provision. The independent variable is the TQM practices and was measured in terms of customer focused services, continuous improvement systems, employee involvement mechanisms and top management support structures. The dependent variable is the quality of service delivery and its indicators included; effectiveness, efficiency, safety, timeliness, equality, patient centered and appropriateness as shown in figure 1:

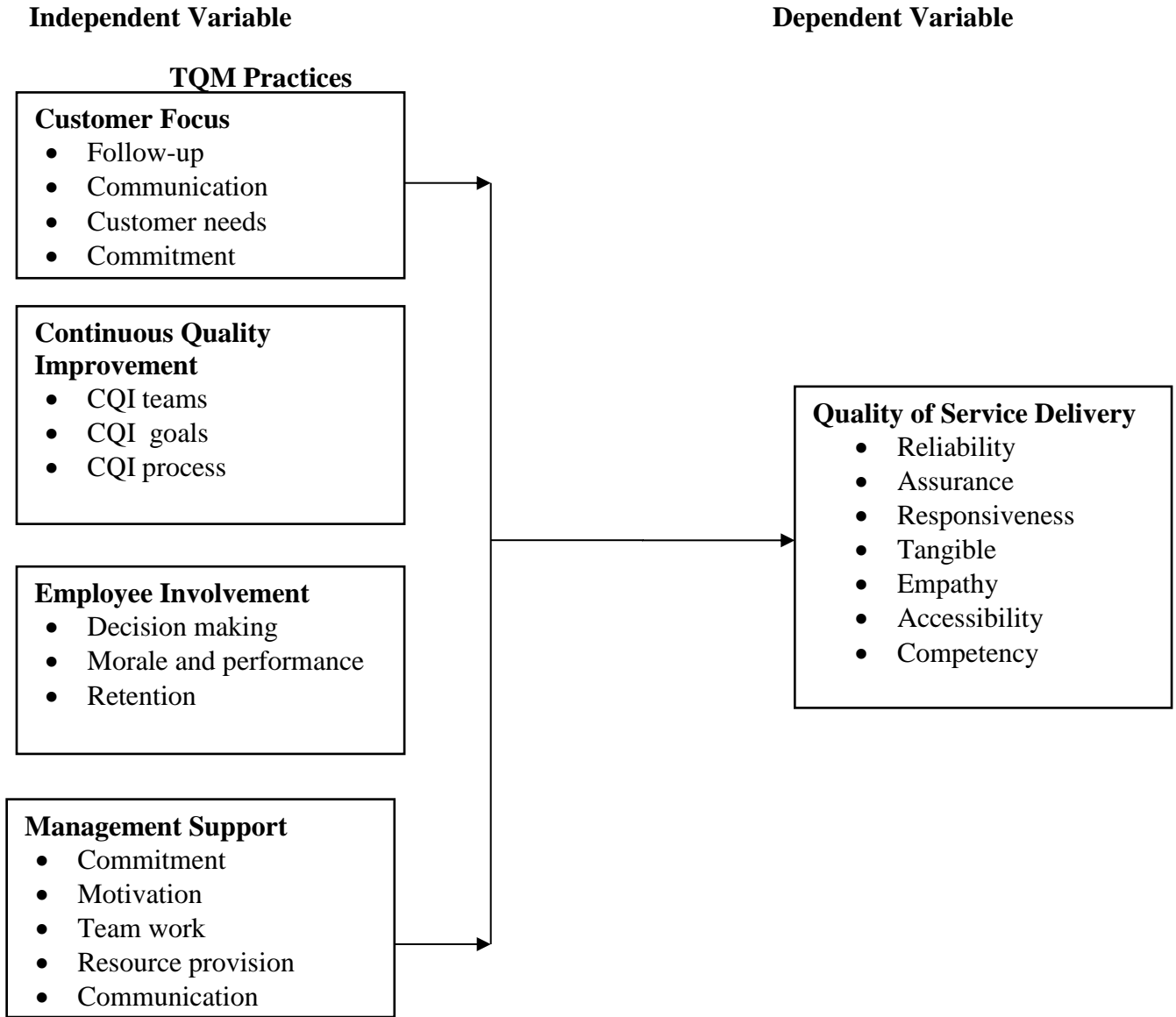


Figure 1: Conceptual Framework

As shown in Figure 1, the relationship between TQM practices and quality of service delivery in healthcare sector is illustrated. Customer focus in terms of follow-ups, commitment, communication and meeting customer needs enhances patient centered service delivery thereby enhancing customer satisfaction. Continuous quality improvement involving established CQI teams, CQI goals and processes promoted effectiveness and efficiency of services as well as enable timely provision of services. Employee involvement in terms of decision making promotes

effective and efficient delivery of services as well as appropriateness and equitability of services. Management support in form of commitment, motivation, communication, and team work and resource mobilizations enables implementations of quality improvement initiatives thereby leading to client satisfaction.

2.6 Operationalization of Variables

Table 1: Operationalization of Variables

Variable	Code	Objective	Indicators	Measurement Scale
Customer Focus	CF	To establish the influence of customer focus on quality service delivery in health sector in Nairobi County.	<ul style="list-style-type: none"> • Follow-up • Communication • Customer needs • Commitment 	Ordinal 5-Point Likert Scale
Continuous Quality Improvement	CQI	To explore the influence of continuous quality improvement on quality service delivery in health sector in Nairobi County.	<ul style="list-style-type: none"> • CQI teams • CQI goals • CQI process 	Ordinal 5-Point Likert Scale
Employee Involvement	EI	To evaluate the influence of employee involvement on quality service delivery in health sector in Nairobi County.	<ul style="list-style-type: none"> • Decision making • Morale and performance • Retention 	Ordinal 5-Point Likert Scale
Management Support	MS	To assess the influence of management support on quality service delivery in health sector in Nairobi County.	<ul style="list-style-type: none"> • Commitment • Motivation • Team work • Resource provision • Communication 	Ordinal 5-Point Likert Scale

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

The overall objective goal of the study was to examine the effect TQM practices on quality services in healthcare sector in Nairobi County. This chapter describes design and methodology that was used in conducting the study, target population, sample and sampling procedures, research instruments, validity and reliability of the instruments, data collection procedures and data analysis techniques.

3.2 Research design

The study adopted cross-sectional descriptive design. Levin (2006) indicates that cross-sectional descriptive design describes the current status of the phenomenon. This design was appropriate for this study because it takes a representative sample (cross-section) to generalize findings to a whole population (Levin, 2006). Cross-sectional descriptive design is also advantageous because it can determine the prevalence of an outcome and cross-sectional surveys can be completed in a relatively short-time (Omair, 2016).

3.3 Target Population

Target population refers to a larger group from which the sample is taken (Kombo & Tromp, 2013). The study targeted all health care providers drawn from five hospitals (three public and two private) in Nairobi County including; Mbagathi hospital, Mama Lucy hospital, Pumwani hospital, Coptic hospital and Aga Khan Hospital. The total population of staff working at the five facilities was 1,652 as summarized below:

Table 2: Target Population

Hospital	Population
Mbagathi hospital	468
Mama Lucy hospital	413
Pumwani hospital	346
Coptic hospital	208
Aga Khan hospital	217
Total	1,652

Source: Hospital Management

3.4 Sample and Sampling Procedure

This study adopted Yamane (1967) formula to calculate the sample size of 115 respondents from health workforce population of 1,652. Yamane's formula uses a 95 percent level of confidence and a maximum variability (p) =0.09. A standard error of 9%. Yamane's formula is as shown below:

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

n= sample size

N= Total population

e= Margin of error

Sample Size Calculation for Students

N=

$$\frac{1,652}{1 + 1652(0.09)^2}$$

n= 115 Respondents

Table 2: Sample Size Distribution

Hospital	Population	Sample Size
Mbagathi hospital	468	$468/1652 \times 115 = 33$
Mama Lucy hospital	413	$413/1652 \times 115 = 29$
Pumwani hospital	346	$346/1652 \times 115 = 24$
Coptic hospital	208	$208/1652 \times 115 = 14$
Aga Khan hospital	217	$217/1652 \times 115 = 15$
Total	1652	115

Stratified random sampling techniques were used to select the respondents from the five hospitals as summarized indicated in Table 3.

3.5 Research Instruments

In this study, the researcher used questionnaires to collect primary data. Secondary data was collected from books, journals, articles, newspapers and published theses.

3.5.1 Questionnaire for Health Care Providers

The researcher used closed and open-ended questions in the questionnaire. The quantitative research paradigm enabled the researcher to collect data to meet the study goals. The questionnaire gave the respondents freedom to express their views or opinion and also make suggestions. Questionnaires were used because they ensure anonymity of the respondent saves time and reduces chances of respondent subjectivity because questionnaires were in paper format. The questionnaire will be constructed based on research objectives. The questionnaires were divided in five sections. Section one focused on demographic information of the respondents, section two examined the role of customer focus on quality-of-service delivery, section three examined the role of continuous quality improvement on quality-of-service delivery, section four evaluated the role of

employee involvement on quality-of-service delivery while section five examined the role of management support on quality-of-service delivery.

3.6 Validity and Reliability Research Instruments

3.6.1 Validity

Validity refers to the degree to which accuracy of data obtained in the study yields true results representing the variables of the study (Kombo & Tromp, 2006). The study ascertained validity of the research instruments by using three approaches: content validity, face validity and concurrent validity. Content and face validity were tested by presenting the research instruments to experts in the field of corporate management at KCA university for critique and their opinions were factored in the study. Besides, concurrent validity was tested using pilot testing. In this study pilot testing of questionnaires was conducted in two health facilities involving 10 (10% of the sample) respondents in the neighboring Kajiado County. The pilot test involved 3 clinical officers, 2 nurses, 1 doctor, 1 dentist and 1 physiotherapist and 2 pharmacists.

3.6.2 Reliability

Reliability is the degree whereby the results of construct measured demonstrate a high percentage of similar outcomes and without bias (Creswell & Clark, 2011). Reliability measures the ability of an instrument to yield consistent outcomes after repeated administration. *Cronbach's alpha* method was appropriate because it requires only one testing session. The reliability of the instruments was interpreted where *Cronbach's alpha* coefficient closer to 1 means the greater the internal consistency of the items in the scale. In addition, coefficient of greater than 0.9 was interpreted to mean excellent degree of reliability, coefficient of greater than 0.8 was interpreted to mean good reliability, coefficient of greater than 0.7 was interpreted to mean acceptable reliability, coefficient of greater than 0.6 was interpreted to mean questionable

reliability while coefficient of 0.5 was considered poor reliability while coefficient of less than 0.5 was considered unacceptable (Kombo & Tromp, 2006). A coefficient of 0.7 was used as recommended by Cronbach (1951). The results are as shown in Table 4.

Table 4: Reliability Test

Variables	Cronbach Alpha
Customer Focus	0.816
Quality Improvement	0.781
Employee Involvement	0.741
Management Support	0.822
Service delivery	0.811

The results indicated that the statements under Customer Focus, Quality Improvement, Employee Involvement, Management Support and Service delivery had a Cronbach alpha of above 0.7 and thus the statement were considered reliable.

3.7 Data Collection Procedures

The researcher obtained a letter of permission from KCA University before proceeding to the field. The researchers presented the documents to the respective management of hospitals for permission to conduct the research. Subsequently, the researcher made arrangements to meet the selected respondents. Consent of all respondents was sought before administering the research instruments.

3.8 Data Processing and analysis

Quantitative data collected from questionnaires was analyzed using descriptive and inferential statistics. The Statistical Package for Social Sciences (SPSS) version 25 was used in

data analysis. The study adopted Pearson correlation and multiple regression analysis to analyze quantitative data.

3.8.1 Pearson Correlation

The study adopted Pearson correlation to determine the existence of linear relationship between two continuous variables. Pearson correlation coefficient of zero was interpreted to mean there is no linear relationship between two continuous variables while correlation coefficient of -1 or $+1$ was interpreted to imply existence of a perfect linear relationship (Kornbrot, 2005).

3.8.2 Multiple Regression Analysis

The study used multiple regression analysis to measure the cause-effect relationship between two or more variables.

3.8.3 Model Specification

The study used inferential statistics to determine the cause-effect relationship between the variable. Multiple regressions was considered most appropriate for this study because it helped to test the significance relationship between independent and dependent variables in order to meet the objectives of the study. The regression formula was as follows;

$$Y = \beta_0 + CFx_1 + QIx_2 + EIx_3 + MSx_4 + e_i$$

Where;

Y=Quality of Health Service

CF= Customer Focus

QI= Quality Improvement

EI= Employee Involvement

MS= Management Support

β_0 = constant,

x_1, x_2, x_3, x_4 = are the coefficients

e_i = is the standard error term.

3.9 Diagnostic Tests

Diagnostic tests determine the goodness of linear regression models. The researcher ensured the following five assumptions of regression using SPSS software version 25; *homoscedasticity, normality and Multicollinearity*”

3.9.1 Multicollinearity

Multicollinearity tests the availability inter-association or inter-correlations among two or more independent variables in a multiple regression model. Testing multicollinearity of data was important to mitigate high variability, sensitivity, skewness and unreliability of results. Multicollinearity was tested using VIF.

3.9.2 Homoscedasticity

Homoscedasticity (which means similar variance) describes a situation where variance of errors is constant. This test is crucial in linear regression because it helps determine whether the variance of the errors from a regression is dependent on the values of the independent variables. To test for heteroscedasticity, the Breusch-Pagan/Godfrey test was used.

3.9.3 Normality

Normality test was used to check whether the data is normally distributed. This test was important because statistical tests such as linear regression and ANOVA require a normally distributed data. Shapiro Wilk test was used to determine normality of the data.

CHAPTER FOUR

DATA ANALYSIS, FINDINGS AND DISCUSSIONS

4.1 Introduction

The main aim of this study was to investigate the effects of Total Quality Management (TQM) practices on quality-of-service delivery in health sector in Nairobi County. The study specifically focused on the effect of customer focus, continuous quality improvement, employee involvement and management support on quality-of-service delivery in health sector in Nairobi County. Data was collected through questionnaires while data was analyzed through descriptive and inferential statistics.

A total of 115 questionnaires were administered to employees of public and public healthcare facilities and 109 were completely filled and returned. This translated to 94.8% response rate. Good response rate was attributed to collaboration with management of the surveyed healthcare facilities as well as cooperation of healthcare providers who voluntarily agreed to participate in this study.

4.2 Demographic Characteristics of Respondents

4.2.1 Gender of Respondents

According to the findings, respondents were perfectly distributed in terms of gender as shown in Table 5:

Table 5: Gender of Respondents

<i>Gender</i>	<i>Frequency</i>	<i>Percentage</i>
Male	52	47.7%
Female	57	52.3%
Total	109	100.0%

As shown in Table 5, female respondents were slightly more than male respondents by 4.6%. This finding implies that healthcare workers in Nairobi County are fairly distributed in terms of gender. The constitution of Kenya (2010) requires institutions to ensure at least a third of either gender during selection or appointments.

4.2.2 Age of Respondents

According to the findings, close to two thirds of respondents were youth aged between 18-34 years as shown in Table 5:

Table 6: Age of Respondent

<i>Age category</i>	<i>Frequency</i>	<i>Percentage</i>
18-24 years	17	15.6%
25-34 years	50	45.9%
35-44 years	34	31.2%
45-54 years	8	7.3%
Total	109	100.0%

Table 6 shows that majority (45.9%) of the respondents were aged between 25-34 years followed by 31.2% of the respondents who were aged between 35-44 years and 15.6% of the

respondents who were aged between 18-24 years. This implies that close to two thirds of healthcare workers in Nairobi County are youth. Youth are considered productive, industrious and innovative.

4.2.3 Highest Academic Qualification of Respondents

This study revealed that the respondents had fairly good education attainment as shown in Table 7:

Table 7: Highest Academic Qualification

Academic Qualification	Frequency	Percentage
Doctorate degree	2	1.8%
Master's degree	16	14.7%
Bachelor's degree	52	47.7%
Diploma	28	25.7%
Certificate	11	10.1%
Total	109	100.0%

As shown in Table 7, majority (47.7%) of the respondents had bachelor degree qualification, 25.7% of the respondents had college diploma qualification, 14.7% had master’s degree qualification and 10.1% of the respondents had college certificate qualification while 1.8% of the respondents had doctorate degree qualification. Education is an important ingredient in provision of quality services and the Ministry of Education is responsible for setting minimum entry grades for students who wish to study medical related courses.

4.2.4 Working Experience of Respondents

The study revealed that more than 87.2% of the respondents had a working experience of more than one year as shown in Table 8:

Table 8: Working Experience

Years of Experience	Frequency	Percentage
Less than 1 year	14	12.8%
1-5 years	44	40.4%
6-10 years	29	26.6%
11-14 years	13	11.9%
15 and above years	9	8.3%
Total	109	100.0%

According to the findings, majority (40.4%) of the respondents had a working experience of between 1-5 years followed by 26.6% of the respondents who had a working experience of between 6-10 years, 12.8% of the respondents had a working experience of less than a year and 11.9% had a working experience of between 11-14 years while 8.3% of the respondents had a working experience of above 15 years. Owing to the length of service, the respondents were considered resourceful in sharing experiences and information on the influence of TQM on quality health services.

4.2.5 Job Designation of Respondents

According to the findings, majority of the respondents were medical staffs who were involved in day-to-day provision of healthcare services to patients as shown in Table 9.

Table 9: Job Designation

Designation	Frequency	Percentage
a) Nurse	44	40.4%
b) Clinical Officer	21	19.3%
c) Doctor	8	7.3%
d) Finance Officer	5	4.6%
e) Pharmacist	7	6.4%
f) Physiotherapist	3	2.8%
g) Nutritionist	4	3.7%
h) Quality Assurance Officer	3	2.8%
i) Administrator	5	4.6%
j) Others	9	8.3%
Total	109	100.0%

Table 9 shows that majority (40.4%) of the respondents were nurses, followed by clinicians (19.3%), doctors (7.3%) and pharmacist (6.4%) while 4.6% each of the respondents were administrators and finance officers respectfully. In addition, 2.8% each of the respondents were quality assurance officers and physiotherapists. Other staff including secretary, cleaners, record officers and security officers represented 8.3% of the respondents. This finding implies that the respondents were drawn from different sections in the healthcare sector and thus this enriched the information shared by the respondents.

4.3 Customer Focus in Healthcare Sector

The respondents were asked to indicate customer focus practises used in the healthcare sector and the findings are summarized in Table 10:

Table 10: Customer Focus

Statements	Strongly Disagree	Disagree	Uncertain	Agree	Strongly Agree
a) Health care providers conduct effective assessments and follow-ups on patients	0 (0.0%)	6(5.5%)	16 (14.7%)	37 (33.9%)	50 (45.9%)
b) Health care providers build strong relationships with patients through effective communication	1 (0.9%)	1(0.9%)	6 (5.5%)	42 (38.5%)	59 (54.1%)
c) Health care providers in this facility endeavor to meet patient needs	3 (2.8%)	0 (0.0%)	6 (5.5%)	29 (26.6%)	71 (65.1%)
d) Health care providers are committed to achieving both goals of patients and the hospital	3 (2.8%)	0 (0.0%)	4 (3.7%)	38 (34.9%)	64 (58.7%)
e) Patient centered approach is used in attending to patient's need	3 (2.8%)	4 (3.7%)	5(4.6%)	41 (37.6%)	56 (51.4%)

According to the findings shown in Table 9, the respondents generally agreed that healthcare providers conducted effective assessments and follow-ups on patients (79.8%), healthcare providers built strong relationships with patients through effective communication (92.6%), healthcare providers endeavored to meet patient needs (90.7%) and healthcare providers were committed to achieving both goals of patients and the hospital (93.6%) while 89.0% generally

agreed that patient centered approach was used in attending to patient’s need. This finding is consistent with a study by Kangethe (2015) examined the role of customer focused practices on operational performances of government entities in Kenya and concluded that customer focused practices resulted in improved operational performance, workforce participation, effective complaint and feedback system, reduction in costs, improved revenue generation, efficient delivery of services and customer satisfaction.

4.4 Continuous Quality Improvement in Healthcare Sector

The respondents were asked to indicate continuous quality improvement practises used in the healthcare sector and the findings are summarized in Table 11:

Table 11: Continuous Quality Improvement

Statements	Strongly Disagree	Disagree	Uncertain	Agree	Strongly Agree
a) This facility has active CQI teams	1 (0.9%)	3 (2.8%)	6 (5.5%)	36 (33.0%)	63 (57.8%)
b) CQI goals and process are well defined	1 (0.9%)	7 (6.4%)	6 (5.5%)	30 (27.5%)	65 (59.6%)
c) The CQI team activities focus on service quality	3 (2.8%)	2 (1.8%)	9 (8.3%)	28 (25.7%)	67 (61.5%)
d) The composition of CQI teams is diverse	1 (0.9%)	4 (3.7%)	15(13.8%)	35 (32.1%)	54 (49.5%)
e) Routine MDT complement work of CQI teams	3 (2.8%)	6 (5.5%)	13 (11.9%)	40 (36.7%)	47 (43.1%)

According to the findings shown in Table 11, the respondents generally agreed that their respective facilities had active CQI teams (90.8%) and that CQI goals and process were well defined (87.1%). Further, the respondents generally agreed that CQI team activities focused on

service quality (87.2%) and composition of CQI teams was diverse (81.6%) while routine MDT complemented work of CQI teams (79.8%). These findings are consistent with a study by Ahmad, et al., (2012) examined the role of quality improvement interventions on patient satisfaction in healthcare sector in Jordan and found that quality improvement helped to strengthen systems of healthcare delivery thereby improving patient satisfaction. A similar study in Nigeria by Oyeledun, et al., (2017) examined the effect of continuous quality improvement intervention on retention-in-care at 6 months postpartum in a PMTCT program and found that CQI promoted retention of patients in care, honoring of clinic appointment and adherence to treatment plan thereby resulting in improved patient satisfaction.

4.5 Employee Involvement in Healthcare Sector

The respondents were asked to indicate employee involvement practises used in the healthcare sector and the findings are summarized in Table 12:

Table 12: Employee Involvement in Healthcare Sector

Statements	Strongly Disagree	Disagree	Uncertain	Agree	Strongly Agree
a) Employees in this facility are involved in decision making	2 (1.8%)	12 (11.0%)	22 (20.2%)	51 (46.8%)	22 (20.2%)
b) Employee in this facility often receive recognition or praise for doing good work	5 (4.6%)	6 (5.5%)	19 (17.4%)	47 (43.1%)	32(29.4%)
c) Employees are given an opportunity to do what they do best	0 (0.0%)	13 (11.9%)	13 (11.9%)	46 (42.2%)	37 (33.9%)
d) Supervisors care about employees in this facility	0 (0.0%)	15 (13.8%)	15 (13.8%)	51 (46.8%)	28 (25.7%)
e) Employees know what is expected of them at work	1 (0.9%)	0 (0.0%)	11 (10.1%)	33 (30.3%)	64 (58.7%)
f) Employees are involved in on-job training to develop their careers	2 ((1.8%)	9 (8.3%)	10 (9.2%)	40 (36.7%)	48 (44.0%)

As shown in Table 12, the respondents generally agreed that employees in healthcare sector were involved in decision making (67.0%), employees often received recognition or praise for doing good work (72.5%) and employees were given an opportunity to do what they did best (76.1%) while supervisors cared about employees (72.5%). Further, 89.0% of the respondents generally agreed that employees knew what was expected of them at work while 80.7% of the respondents generally agreed that employees were involved in on-job training to develop their careers. These findings are consistent with a study by Mildred (2016) who examined the effect employee involvement and job performance in Kenya concluded that employee involvement through CAPA building programs helped employees to understand the goals and objectives of the goals and this helped to renew their commitment, team spirit and motivation towards delivery of quality services.

4.6 Management Support in Healthcare Sector

The respondents were asked to indicate management support practises used in the healthcare sector and the findings are summarized in Table 13:

Table 13: Management Support in Healthcare Sector

Statements	Strongly Disagree	Disagree	Uncertain	Agree	Strongly Agree
a) Managers/supervisors are committed to the goals and vision of this facility	0 (0.0%)	1 (0.9%)	5 (4.6%)	49 (45.0%)	54 (49.5%)
b) Managers/supervisors communicate effectively with employees	1 (0.9%)	2 (1.8%)	7 (6.4%)	62 (56.9%)	37 (33.9%)
c) Managers/supervisors motivate employees in various ways such as trainings, recognition remuneration and work-life balance activities	3 (2.8%)	11 (10.1%)	21 (19.3%)	51 (46.8%)	23 (21.1%)
d) Managers/supervisors promote teamwork and coexistence among employees	3 (2.8%)	9 (8.3%)	7 (6.4%)	58 (53.2%)	32 (29.4%)
e) Managers/supervisors facilitate timely resource mobilization for activities of the facility	8 (7.3%)	8 (7.3%)	12 (11.0%)	52 (47.7%)	29 (26.6%)

According to the findings shown in Table 13, the respondents generally agreed that managers/supervisors were committed to the goals and vision of their facilities (94.5%), managers/supervisors communicated effectively with employees (90.8%) and managers/supervisors motivated employees in various ways such as trainings, recognition remuneration and work-life balance activities (67.9%). In addition, the respondents generally agreed that managers/supervisors encouraged teamwork and coexistence among employees (82.6%) as well as ensured timely resource mobilization for activities (74.3%).

These findings are consistent with a study by Musinguzi, *et al.*, (2018) who investigated the impact of leadership styles in healthcare facilities in Uganda and concluded that leadership

styles promoted personnel moral and motivation, strengthened team cohesion and improve employee satisfaction thereby leading to quality of service in healthcare sector. Similarly, Shillingi (2017) examined the role of top management in public sector in Tanzania and revealed that top management support was crucial in implementation of strategic plans, mobilization of financial and human resources necessary for provision of quality service in public sector.

4.7 Diagnostic tests

The diagnostic tests conducted included Multicollinearity Test, Test for Heteroscedasti and Normality Test.

4.4.1 Multicollinearity Test

Multicollinearity test was conducted to determine if two or more of the predictor (independent) variables in the regression model was highly correlated. Variance inflation factor (VIF) were used to test multicollinearity and VIF of below 10 indicated acceptable limits. If the VIF value of exploratory variables are greater than 10, then variables were regarded as highly collinear.

Table 14: Multicollinearity Test Using Tolerance and VIF

	Collinearity Statistics	
	Tolerance	VIF
Customer Focus	0.54	1.852
Quality Improvement	0.373	2.680
Employee Involvement	0.449	2.228
Management Support	0.455	2.196

From the findings above all the variables had tolerance values >0.2 and VIF values <10 as shown in Table 14 and thus according to Myres (2015) who indicated that where $VIF \geq 10$ indicate presence of Multicollinearity, there was no multicollinearity among the independent variables.

4.4.2 Test for Heteroscedasticity

Heteroscedasticity is the circumstance in which the variability of a variable is unequal across the range of values of a second variable that predicts it. Running a regression model without accounting for heteroscedasti would lead to unbiased parameter estimates. To test for heteroscedasti, the Breusch-Pagan/Godfrey test was used. Heteroscedasti test was run using Breusch-Pagan / Cook-Weisberg test in order to test whether the error terms are correlated across observations in the cross sectional of the data (Long & Ervin, 2000). The hypothesis was that;

H_1 : The data is Homoscedastic.

If the p-value is less than 0.05, the hypothesis is rejected.

The Breusch-Pagan results are presented in Table 15.

Table 15: Heteroscedasti Results

Breusch-Pagan / Cook-Weisberg test for heteroscedasti

Ho: Constant variance

Variables: fitted values of Service Delivery

chi2(1)	=	56.28
Prob > chi2	=	0.151

Results in Table 15 show that the p-value is greater than the 5%. Then the hypothesis was not rejected at a critical p value of 0.05 since the reported Chi2 (1) = 56.28 and p-value was $0.151 > 0.05$ and thus the data did not suffer from heteroscedasti.

4.4.3 Normality Test

Test for normality determines if the data is well modeled and normally distributed (linear). To test the normality of the variables, Shapiro–Wilk test was used as it has the highest power among all tests for normality. The hypothesis was tested at a critical value at 0.05, where the rule is that reject H_0 if the probability (P) value is less than 0.05 or else do not reject. The dependent variable should be normally distributed because the study was analyzed using a multiple regression model where the condition of normality must be satisfied (Quataroli & Julia, 2012). The hypothesis was that; H_1 : The data is normal.

The results for normality are as shown in Table 16.

Table 16: Normality Outputs

	Shapiro-Wilk	
	Statistic	Sig.
Customer Focus	0.8290	0.3857
Quality Improvement	0.7960	0.1361
Employee Involvement	0.8420	0.3363
Management Support	0.7770	0.4645
Service delivery	0.7530	0.2916

The results indicated that using the Shapiro-Wilk test of normality, the data is normal since the p-values are above 0.05 for all the variables and thus we do not reject the alternative hypothesis (H_1). Therefore, the variables on customer focus, quality improvement, employee involvement,

management support and service delivery are normal in distribution and hence subsequent analysis can be carried out.

4.7 Inferential Statistics

4.7.1 Correlation Analysis

The study conducted correlation analysis to establish the relationship between two or more continuous variables. The findings are shown in Table 17.

Table 17: Bivariate Correlation Analysis

N=109

Variables		Customer Focus	Quality Improvement	Employee Involvement	Management Support	Quality Services
Customer Focus	Pearson	1	.629**	.394**	.313**	.273**
	Sig. (2-tailed)		.000	.000	.001	.004
Quality Improvement	Pearson	.629**	1	.227*	.330**	.433**
	Sig. (2-tailed)	.000		.018	.000	.000
Employee Involvement	Pearson	.394**	.227*	1	.641**	.259**
	Sig. (2-tailed)	.000	.018		.000	.007
Management Support	Pearson	.313**	.330**	.641**	1	.581**
	Sig. (2-tailed)	.001	.000	.000		.000
Quality Services	Pearson	.273**	.433**	.259**	.581**	1
	Sig. (2-tailed)	.004	.000	.007	.000	

As shown in Table 17, correlation analysis was used to determine the existence of a relationship between independent and dependent variables of the study. Findings showed that customer focus (p-value 0.004), quality improvement (p-value, 0.000), employee involvement (p-value, 0.007) and management support (p-value, 0.000) had a positive relationship with quality healthcare services. Positive correlation means that the two variables move in the same direction

(decreasing or increasing) while –ve correlation means one variable is increasing while the other one is decreasing and vice versa i.e., moving in opposite directions;

4.7.2 Multinomial Regression Analysis

The study conducted a multinomial regression analysis to ascertain the cause-effect relationship between the independent and dependent variables.

Table 18: Model Fitting Information

Model	Model Fitting Criteria		Likelihood Ratio Tests	
	-2 Log Likelihood	Chi-Square	df	Sig.
Intercept Only	733.585			
Final	344.133	389.452	156	.000

Table 18 reveals that the model fitted the data thus implying that there was a significant relationship between TQM practices and quality services in healthcare sector in Nairobi County, Kenya.

Table 19: Pseudo R-Square

Cox and Snell	.972
Nagelkerke	.973
McFadden	.517

According to the findings in Table 19, Nagelkerke is 0.973 and this can be interpreted to mean that 97.3% variations of quality services in healthcare sector was due to changes in customer focus, quality improvement, employee involvement and management support at 95% confidence interval.

Table 20: Likelihood Ratio Tests

Effect	Model Fitting Criteria	Likelihood Ratio Tests		
	-2 Log Likelihood of Reduced Model	Chi-Square	df	Sig.
Intercept	489.979	145.846	39	.000
Customer Focus	453.275 ^a	109.142	39	.000
Quality Improvement	419.971 ^a	75.838	39	.000
Employee Involvement	456.270 ^a	112.137	39	.000
Management Support	472.673 ^a	128.541	39	.000

Table 20 shows the impact of each independent variable on dependent variables. By taking all independent variables constant at zero, quality service coefficient was 489.979. The findings equally shows that when all other independent variables are at zero, a unit increase in customer focus will lead to 453.275^a increase in quality services in healthcare sector, a unit increase in quality improvement will lead to a 419.971^a increase in quality services in healthcare sector and a unit increase in employee involvement will lead to 456.270^a increase in quality services in healthcare sector while a unit increase in management support will lead to 472.673^a increase in quality services in healthcare sector. This finding means that increasing implementation of TQM practices in healthcare facilities will result in a substantial improvement in quality services.

CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

This chapter presents the summary of the study, conclusions and recommendations towards enhancing quality services in healthcare sector.

5.2 Summary

This study sought to examine the influence of Total Quality Management (TQM) practices on quality services in healthcare sector in Nairobi County, Kenya. Specifically, this study examined the influence of customer focus, quality improvement, employee involvement and management support on quality services in healthcare sector in Nairobi County.

The study adopted cross-sectional descriptive design and targeted healthcare providers in five hospitals (three public and two private) in Nairobi County including; Mbagathi hospital, Mama Lucy hospital, Pumwani hospital, Coptic hospital and Aga Khan Hospital. Yamane (1967) formula was used calculate the sample size of 115 respondents from healthcare workforce population of 1,652. Data was collected using questionnaires and analysed through descriptive and inferential statistics. Summary of findings is given below:

5.2.1 Customer Focus in Healthcare Sector

Customer focus is a critical component of TQM. It encompasses aligning services to meet the most critical needs and desires of patients. Findings from this study revealed that healthcare providers conducted effective assessments and follow-ups on patients, built strong relationships with patients through effective communication and endeared to meet patient needs. Further, the findings showed that healthcare providers were committed to achieving both goals of patients and the hospital and healthcare providers adopted patient centered approach attending to patient's need.

This corroborates with a study by Kangethe (2015) who examined the role of customer focused practices on operational performances of government entities in Kenya and concluded that customer focused practices resulted in improved operational performance, workforce participation, effective complaint and feedback system, reduction in costs, improved revenue generation, efficient delivery of services and customer satisfaction.

5.2.2 Continuous Quality Improvement in Healthcare Sector

Continuous quality improvement is a critical part of TQM practices in healthcare sector. It involves regular monitoring and tracking gaps in implementation of services and coming up with effective strategies to address the gaps. This study found that healthcare facilities in Nairobi County had active CQI teams with clearly defined goals and process. Composition of CQI teams was diverse. The CQI team activities focused on service quality and routine MDT complemented work of CQI teams. These findings are consistent with a study by Ahmad, et al., (2012) examined the role of quality improvement interventions on patient satisfaction in healthcare sector in Jordan and found that quality improvement helped to strengthen systems of healthcare delivery thereby improving patient satisfaction. A similar study in Nigeria by Oyeledun, *et al.*, (2017) examined the effect of continuous quality improvement intervention on retention-in-care at 6 months postpartum in a PMTCT program and found that CQI promoted retention of patients in care, honoring of clinic appointment and adherence to treatment plan thereby resulting in improved patient satisfaction.

5.2.3 Employee Involvement in Healthcare Sector

Employees form critical part of any organization. They determine the success of an entity since they are involved in day-to-day delivery or implementation of activities. This study found that employees healthcare sector was involved in decision making and often received recognition

or praise for doing good work. Employees were also given an opportunity to do what they did best and their supervisors cared about them. Further, employees knew what was expected of them at work and were involved in on-job training to develop their careers. These findings are consistent with a study by Mildred (2016) who examined the effect employee involvement and job performance in Kenya concluded that employee involvement through capa building programs helped employees to understand the goals and objectives of the goals and this helped to renew their commitment, team spirit and motivation towards delivery of quality services.

5.2.4 Management Support in Healthcare Sector

Managers or leadership of any organization is essential in achieving quality services. This is because managers/leaders play a critical role in setting the vision, goals and objectives of an organization. They also play a significant role in mobilizing resources and providing strategic leadership in enhancing competitive advantage of their organization. This study found that managers/supervisors were committed to the goals and vision of their facilities and communicated effectively with employees. The managers/supervisors motivated employees through trainings, recognition remuneration and work-life balance activities and encouraged teamwork and coexistence among employees as well as ensured timely resource mobilization for activities. These findings are consistent with a study by Musinguzi, *et al.*, (2018) who investigated the impact of leadership styles in healthcare facilities in Uganda and concluded that leadership styles promoted personnel moral and motivation, strengthened team cohesion and improve employee satisfaction thereby leading to quality of service in healthcare sector. Similarly, Shillingi (2017) examined the role of top management in public sector in Tanzania and revealed that top management support was crucial in implementation of strategic plans, mobilization of financial and human resources necessary for provision of quality service in public sector.

5.3 Conclusions

This study concludes that there is a significant relationship between TQM practices and quality services in healthcare sector in Nairobi County, Kenya. This is supported by inferential statistics that revealed that TQM practices of customer focus, quality improvement, employee involvement and management support contribute to 97.3% variations of quality services in healthcare sector at 95% confidence interval. Further, multinomial statistics revealed that quality service coefficient was 489.979. This implied that when all other independent variables are at zero, a unit increase in customer focus will lead to 453.275^a increase in quality services in healthcare sector, a unit increase in quality improvement will lead to a 419.971^a increase in quality services and a unit increase in employee involvement will lead to 456.270^a increase in quality services while a unit increase in management support will lead to 472.673^a increase in quality services.

5.4 Recommendations

This study recommends that healthcare facilities (public & private) should bolster implementation of TQM interventions since they promote quality of services. This is because TQM practices were found to be significant in promoting reliable, responsive, accessible, tangible and competent services.

This study recommends that the Ministry of Health should develop a standard of TQM care and roll it out to all facilities across the countries in bid to improve quality of services in healthcare sector.

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APPENDICES

Appendix A: Consent Letter

My name is Judith Omore, a student at KCA University pursuing Master of Business Administration (Corporate Management Option) At KCA University. As part of the requirement for my course, I am conducting a study focused on “*Effect of Total Quality Management (TQM) Practices on Service Delivery in Health Sector in Nairobi County, Kenya.*” You are invited to participate in the study by sharing information which will make this study complete. You are also allowed to consult in case you do not understand some words or questions.

Voluntary Participation

Your participation in the study is purely on a voluntary basis and the researcher will not force you to participate in the study against your will. You have a right to withdraw at any time you feel uncomfortable. You have a right to decline to participate in the study and this will not affect the health services you offer in this facility.

Compensation

There is no monetary compensation for participating in this study since the study is purely for academic purposes. However, your participation through sharing information and experiences will be useful in helping relevant stakeholders such as management, patients, health care workers and both the County and national government to have a better understanding of how Total Quality Management (TQM) Practices affect Service Delivery in Health Sector in Nairobi County, Kenya. Therefore, I confirm that there is no harm associated with information you will share.

Assurance of Confidentiality

The information you provide will be treated with total confidentiality and will not be disclosed to any other person without your consent. Some excerpts or quotations from the survey

may be included in the final report but the researcher will make sure that either your name or your identifying characteristics are protected. More importantly, your responses will be coded in numbers which are not traceable to an individual. In the questionnaires, participants are not encouraged not to write their names for purposes of safeguarding confidentiality.

Discomfort and Risks

The researcher may ask some questions on personal subjects and this may make you feel uncomfortable. If this happens, you have a right to refuse answering such questions or even opt out of the study at will. Responding to the questionnaire or interview questions may take about 30 minutes of your time and therefore the researcher requests your patience.

Participant Statement

I have read and clearly understood the information provided above concerning the proposed study on “*Effect of Total Quality Management (TQM) Practices on Service Delivery in Health Sector in Nairobi County, Kenya.*” I have been accorded enough chance to ask questions and they have been answered to my satisfaction. I understand that by choosing to either agree or disagree in participating in this study will not affect my work in this hospital. I understand that I have a right to opt out of the study interview at any time if I feel uncomfortable. I understand that participating in this study is important in helping the health care relevant stakeholders in enhancing Total Quality Management and quality of health care services. I been assured of confidentiality and that information I will provide will be treated with highest level of confidentiality.

Signature of participant..... *Date*.....

Signature of witness..... *Date*.....

Researcher’s Statement

I, the undersigned have explained to the participant about the study procedures, benefits, risks, compensation, confidentiality and contact information in a language he/she can understand.

Signature of the Researcher *Date*.....

Signature of the witness.....*Date*.....

I can be contacted on the following address in case you have any question or concern about the study.

*Judith Omore,
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Appendix B: Questionnaire for Health Care Staff

This questionnaire seeks your views on “*Effect of Total Quality Management (TQM) Practices on Service Delivery in Health Sector in Nairobi County, Kenya.*” I kindly request you to spare some time to fill in this questionnaire as honestly as possible. Any information obtained will be for academic purposes and any information provided will be treated with outmost confidentiality. Do not write your name anywhere in the questionnaire. Thank you.

Section A: Demographic Characteristics of Respondents

1. What is your gender?
Male () Female ()
2. What is your age bracket?
18-24 years () 25-34 years () 35-44 years () 45-54 years () Above 55 years ()
3. What is your highest Academic Qualification?
PHD () Master’s Degree () Bachelor’s Degree () Diploma () Certificate ()
4. What is your job designation?
.....
5. How long have you worked as a health care provider?
Less than 1 year () 1-5 years () 6-10 years () 11-14 years () above 15 years ()
6. Are the following Total Quality Management Techniques used in your facility?

TQM Technique	Yes	No
Customer Focus		
Continuous Quality Improvement		
Employee Involvement		
Management Support		

Section B: Customer Focus in Health Sector

7. In your own opinion, to what extent do you agree with the statements relating to the customer focus in health sector in Nairobi County? Use a scale of 1-5 where *Strongly Agree (SA)=5, Agree (A)=4, Uncertain (U)=3, Disagree (D)=2, Strongly Disagree (SD)=1*

Statements		Response				
		SA	A	U	D	SD
a)	Health care providers conduct effective assessments and follow-ups on patients					
b)	Health care providers build strong relationships with patients through effective communication					
c)	Health care providers in this facility endeavor to meet patient needs					
d)	Health care providers are committed to achieving both goals of patients and the hospital					
e)	Patient centered approach is used in attending to patient's need					

Section C: Continuous Quality Improvement in Health Sector

8. In your own opinion, to what extent do you agree with the statements relating to the Continuous Quality Improvement (CQI) in health sector in Nairobi County? Use a scale of 1-5 where *Strongly Agree (SA)*=5, *Agree (A)*=4, *Uncertain (U)*=3, *Disagree (D)*=2, *Strongly Disagree (SD)*=1

Statements		Response				
		SA	A	U	D	SD
a)	This facility has active CQI teams					
b)	CQI goals and process are well defined					
c)	The CQI team activities focus on service quality					
d)	The composition of CQI teams is diverse					
e)	Routine MDT complement work of CQI teams					

Section D: Employee Involvement in Health Sector

9. In your own opinion, to what extent do you agree with the statements relating to employee involvement in health sector in Nairobi County? Use a scale of 1-5 where *Strongly Agree (SA)*=5, *Agree (A)*=4, *Uncertain (U)*=3, *Disagree (D)*=2, *Strongly Disagree (SD)*=1

Statements		Response				
		SA	A	U	D	SD
a)	Employees in this facility are involved in decision making					
b)	Employee in this facility often receive recognition or praise for doing good work					
c)	Employees are given an opportunity to do what they do best					
d)	Supervisors care about employees in this facility					
e)	Employees know what is expected of them at work					
f)	Employees are involved in on-job training to develop their careers					

Section D: Management Support in Health Sector

10. In your own opinion, to what extent do you agree with the statements relating to employee involvement in health sector in Nairobi County? Use a scale of 1-5 where *Strongly Agree (SA)=5, Agree (A)=4, Uncertain (U)=3, Disagree (D)=2, Strongly Disagree (SD)=1*

Statements		Response				
		SA	A	U	D	SD
a)	Managers/supervisors are committed to the goals and vision of this facility					
b)	Managers/supervisors communicate effectively with employees					
c)	Managers/supervisors motivate employees in various ways such as trainings, recognition remuneration and work-life balance activities					
d)	Managers/supervisors promote teamwork and coexistence among employees					
e)	Managers/supervisors facilitate timely resource mobilization for activities of the facility					

Section D: Quality Services in Health Sector

11. In your own opinion, to what extent do you agree with the statements relating to quality services in health sector in Nairobi County? Use a scale of 1-5 where **Strongly Agree (SA)=5, Agree (A)=4, Uncertain (U)=3, Disagree (D)=2, Strongly Disagree (SD)=1**

Statements		Response				
		SA	A	U	D	SD
1. Reliability	There is accurate medical billing					
	Medical records are properly kept					
	Service provision is timely					
2. Responsiveness	Medical personnel offer prompt services					
	Medical personnel do proper assessment and follow-up					
	Medical personnel communicate effectively					
3. Competence	Medical staff in this facility are well trained					
	Support staff in this facility are well trained					
	The facility engages in research					
4. Access	Patient wait for a short time to be served					
	Facility has convenient working hours					
	Facility is located in a convenient location					
5. Courtesy	Medical personnel are polite, friendly and respectful					
6. Communication	Personnel use simple and plain language					
	The facility has a complaint/feedback system					
7. Credibility	Patients trust or believe services offered in the facility					
	Medical personnel are always honest with patients					
8. Safety	Patient information is kept private and confidential					
	The facilities are secure and safe from any danger					
	Facility has secure financial systems					
9. Knowing/Understanding the Patient	Patients are accorded individualized attention					
	Personnel learn patient needs and expectation					

	Personnel recognize the patients					
10. Tangibles	Medical personnel are ever present at work					
	There are appropriate tools and equipment for use					
	Physical premise is conducive for patients					

Source: Parasuraman, Zeithaml, & Berry, L. (1985).

12. Please suggest ways of enhancing Total Quality Management in health care sector in Nairobi County?

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End: Thank You for Your Participation