

**INFLUENCE OF TOTAL QUALITY MANAGEMENT PRACTICES ON SERVICE  
DELIVERY IN HEALTHCARE IN PUBLIC HEALTH FACILITIES IN KISUMU EAST  
SUB-COUNTY, KENYA**

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**2017**

**DECLARATION**

This research project report was my original work and has not been presented for any award in any university.

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This research project report has been submitted for examination with our approval as the University supervisors.

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## **DEDICATION**

This research study was dedicated unto my entire family members: My Mother Mrs Beatrice Oluoch, my late father Mr. Charles Oluoch, my wife Mrs. Violet Vihenda, my son Ethan Omondi and my elder sister Mrs. Judy Oluoch for the moral, material and spiritual support and understanding, which they accorded to me during the writing of this research project report.

God's blessings be upon you all.

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## TABLE OF CONTENT

<b>DECLARATION.....</b>	<b>ii</b>
<b>DEDICATION.....</b>	<b>iii</b>
<b>ACKNOWLEDGMENT .....</b>	<b>iv</b>
<b>LIST OF TABLES .....</b>	<b>ix</b>
<b>LIST OF FIGURES .....</b>	<b>x</b>
<b>LIST OF ABBREVIATIONS AND ACRONYMS .....</b>	<b>xi</b>
<b>ABSTRACT.....</b>	<b>xii</b>
<b>CHAPTER ONE:INTRODUCTION .....</b>	<b>1</b>
1.1 Background of the Study .....	1
1.2 Statement of the Problem.....	6
1.3 Purpose of the Study .....	8
1.4 Objectives of the Study.....	8
1.5 Research Questions.....	8
1.6 Study Hypotheses.....	9
1.7 Justification of the Study .....	9
1.8 Basic Assumptions of the Study .....	10
1.9 Limitations of the Study.....	11
1.10 Delimitations of the Study .....	11
1.11 Definition of Significant Terms used in the study.....	12
1.12 Organization of the Study .....	13

<b>CHAPTER TWO:LITERATURE REVIEW.....</b>	<b>14</b>
2.1 Introduction.....	14
2.2 Health Sector in Kenya .....	14
2.3 The Concept of Total Service Delivery in Healthcare.....	15
2.4 Managerial Commitment and Service Delivery. ....	17
2.5 Staff Training and Service delivery. ....	20
2.6 Employee Involvement and Service Delivery .....	21
2.7 Continuous Improvement and Service delivery.....	23
2.8 Theoretical Framework.....	26
2.8.1 The systems theory.....	26
2.8.2 Theory of psychology.....	27
2.9 Conceptual Framework.....	28
<b>CHAPTER THREE:RESEARCH METHODOLOGY .....</b>	<b>29</b>
3.1. Introduction.....	29
3.2 Research Design.....	29
3.3 The Target Population.....	29
3.4 Sampling, Sample Size and Sampling Techniques.....	30
3.5. Research Instruments .....	31
3.6 Data Collection Procedures.....	33
3.7 Data Analysis .....	34
3.8 Ethical Considerations .....	34

**CHAPTER FOUR:DATA ANALYSIS, PRESENTATION AND INTERPRETATION .... 36**

4.1 Introduction.....	36
4.2 Questionnaire Return Rate .....	36
4.3 Demographic Information.....	37
4.4 Managerial Commitment and Service delivery in Public Health Facilities.....	38
4.5 Staff Training and Service Delivery in Public Health Facilities.....	42
4.6 Employee Involvement and Service Delivery in Public Health Facilities.....	45
4.7 Continuous Improvement and Service Delivery in Public Health Facilities .....	48
4.8 Service Delivery in Healthcare in Public Health Facilities .....	51
4.9 Regression Analysis.....	53
4.10 Hypothesis Testing.....	54

**CHAPTER FIVE: SUMMARY OF FINDINGS, DISCUSSIONS, CONCLUSIONS AND RECOMMENDATIONS..... 56**

5.1 Introduction.....	56
5.2 Summary of findings.....	56
5.3 Discussions .....	58
5.4 Conclusions.....	58
5.5 Recommendations.....	61
5.6 Contribution to body of Knowledge .....	63
5.7 Suggestions for further study .....	64

<b>REFERENCES.....</b>	<b>65</b>
<b>APPENDICES .....</b>	<b>72</b>
<b>Appendix I: Letter of Introduction .....</b>	<b>72</b>
<b>Appendix 2: Questionnaires.....</b>	<b>73</b>
<b>Appendix 3: List of facilities visited by the researcher .....</b>	<b>79</b>
<b>Appendix 4: Introductory Letter from the University.....</b>	<b>80</b>
<b>Appendix 5:Ethical Approval .....</b>	<b>81</b>
<b>Appendix 6: Research Permit .....</b>	<b>82</b>



## LIST OF TABLES

Table 3.1:Table showing sample size .....	30
Table 3.2:Sample for pilot testing of questionnaire .....	32
Table 4.1: Age of the respondents .....	36
Table 4.2: Demographic Information.....	37
Table 4.3: Views on Managerial Commitment and Quality of healthcare.....	39
Table 4.4: Correlation between managerial commitment and service delivery in public healthcare facilities.....	41
Table 4.5: Views on Staff Training and Quality of Healthcare .....	42
Table 4.6: Correlation between staff training and service delivery in public health facilities.....	44
Table 4.7: Views on employee involvement and quality of healthcare .....	45
Table 4.8: Correlation between Employee involvement and Service delivery in public healthcare facilities .....	47
Table 4.9: Views on continuous improvement and quality of healthcare .....	48
Table 4.10: Correlation between Employee involvement and Service delivery in public healthcare facilities.....	50
Table 4.11: Views on service delivery in public facilities .....	51
Table 4.12: Regression Analysis.....	53

## LIST OF FIGURES

Figure 2.1: Conceptual framework .....	28
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## LIST OF ABBREVIATIONS AND ACRONYMS

<b>TQM</b>	Total Quality Management
<b>PHF</b>	Public Health Facilities
<b>CIDP</b>	County Integrated Development Plan
<b>KMA</b>	Kenya Medical Association
<b>NGO</b>	Non-Governmental Organizations
<b>USAID</b>	United states Agency for International Development
<b>ACA</b>	Affordable Care Act
<b>FTC</b>	Free Standing Technical Cooperation
<b>MDGs</b>	Millennium Development Goals
<b>RH</b>	Reproductive Health
<b>ACA</b>	Affordable Care Act
<b>DRC</b>	Democratic Republic of the Congo
<b>USAID</b>	United States Agency for International Development
<b>NHA</b>	National Health Accounts
<b>NHIF</b>	National Hospital Insurance Fund
<b>PEPFAR</b>	President’s Emergency Program for AIDS Relief
<b>ACA</b>	Affordable Care Act
<b>OECD</b>	Organization for Economic Co-operation and Development
<b>MOH</b>	Ministry of Health

## ABSTRACT

The study's aim was to establish the influence of total quality management practices on service delivery in public health facilities in Kisumu East Sub-county, Kenya. The below objectives aided in guiding the study: To find out the influence of management commitment on service delivery in healthcare in public health facilities in Kisumu East Sub-county, Kenya, To establish the influence of staff training on service delivery in healthcare in public facilities in Kisumu East Sub-county, Kenya, To examine the influence of employee involvement on service delivery in healthcare in public facilities in Kisumu East Sub-county, Kenya, and To examine the influence of continuous improvement on service delivery in healthcare in public facilities in Kisumu East Sub-county, Kenya. Descriptive survey research design method was used by the research study. The target population was the medical personnel: The facility doctor/nurse/clinician in-charges, Pharmacy technicians, Laboratory technicians, Nurses from 10 health facilities in Kisumu East Sub-county, Kenya. The study did a census on all the 10 health facilities, the researcher picked 4 respondents from each facility: 1 facility doctor/nurse in-charges, 1 Pharmacy technicians, 1 Laboratory technicians and 1 Nurses. Purposive sampling technique was used to pick the 1 facility doctor/nurse in-charges, 1 Pharmacy technicians and 1 Laboratory technician because most public health facilities just have one personnel in those position. Simple random sampling was used to pick one nurse of the 1-5 that work in those health facilities. The study used questionnaires for data collection. To ensure the validity of the instruments, the questionnaires were given to two health personnel and university lecturers to vet them so as to ensure its appropriateness, relevance and clarity, adequate coverage of the research objective. Test-retest technique was used to measure the questionnaires' reliability. Both descriptive and inferential statistics were used to analyse the data, chi-square statistic was used to test the hypothesis while spearman correlation and logit regression were used to test the association between the independent and the dependent variables. Data presentation was through the use of frequencies and percentages with inferential statistics. The findings revealed that there was a significant moderate positive relationship between managerial commitment and service delivery  $r=0.588^{**}$   $p<0.05$ . The study established that there was a significant moderate positive relationship between staff training and service delivery  $r=0.473^{**}$ . It was established that there was a significant moderate positive relationship between employee involvement and service delivery in public healthcare facilities in Kisumu East Sub-county, Kenya  $r= .567^{**}$ ,  $p<0.05$ . It was found out that there was a significant strong positive relationship between continuous improvement and service delivery in public health facilities  $r=0.860^{**}$ ,  $p<0.05$ . The county government need to further enhance managerial commitment in implementing total quality management practices in the facilities. The county government needs to come up with a policy to ensure regular and systematic on-job training to all the medical personnel in Kisumu East Sub-county, Kenya. The health facility in-charges and the management boards need to institutionalize employee engagement by coming up with a clear framework that shall create a platform for employee participation in total quality management in public health facilities in Kisumu East Sub-county, Kenya. The County government of Kisumu needs to document and sensitize all the health facilities the continuous improvement strategy for healthcare.

## CHAPTER ONE

### INTRODUCTION

#### 1.1 Background of the Study

Globally, strengthening service delivery forms a key driving factor towards the accomplishment of Millennium Development Goals (MDGs) that are related to health, comprising delivery of interventions to decrease maternal mortality, child mortality, malaria, tuberculosis, and HIV/AIDS pandemic. Service delivery and provision constitute direct outputs of inputs injected into the health system, including health workforce, supplies, procurement as well as financing. One of the major influence on the reduction of the service delivery by WHO are poor management practices (Kieny, 2016). Increased inputs are viewed as critical in facilitating access to services and enhancing service delivery. Strengthening the availability of health services that conform to required minimum standards as well as securing their access constitutes crucial functions needed of a health system (WHO MBHSS, 2010).

According to (Ruiz and Simon, 2004), various changes are experienced in the Health Care Systems worldwide that are attributed to acknowledgment of both medical and system errors or either of the two. Other factors responsible for these changes include: Legal requirement for quality management in given states Germany being one of them (Moeller *et al.*, 2000), the evaluation of the quality of service provided (Wisniewski, 2005), the complexity of medical care and the cost of health care that was on the increase (Ramanathan, 2005). This has hence lead to the prioritization of the care and service quality provision to patients in several countries (Naves and Storn, 2005).

Total Quality Management (TQM) has currently mushroomed as a strategic force that was globally recognizable with several benefits, including strengthened service delivery, the best employee focus as well as enthusiasm, customer satisfaction, reduced wastage, and improved overall performance (Yang, 2003). TQM has therefore proved to be an effective solution towards improving competence in the provision of healthcare and was transforming to be important for public healthcare facilities. Most healthcare facilities are currently directing their efforts toward TQM implementation towards cost reduction and quality improvement for the services they provide. Nonetheless, it was unlikely that quality dimensions are well recognizable within the healthcare sector, despite the existent of several measurements that have been made available (Huq, 2005). Moreover, a pressing consensus that customer satisfaction was a crucial indication of healthcare quality exists in this sector and most healthcare facilities are beginning to realize the need to embrace and implement platforms for change that facilitates the care of patient's delivery via TQM (Schalk & Dijk, 2005).

Healthcare sector has since the 1980's been learning from and emulating the manufacturing industries in designing and measuring the quality of its services. The Institute of Medicine perceives quality as the extent to which healthcare provision to patients improves the chances of the intended results and are in conformity with the modern knowledge. The practice of enhancing quality in healthcare has improved significantly over the past decade. In the US and Europe there have over the last decade been many studies on quality improvement in healthcare facilities. This has been driven by increased customer awareness and expectations for safety and quality; advance in technology and communication; advances in medical knowledge and the complexity of healthcare and its delivery; the need for health institutions to be more efficient and

cost effective. Although most studies have been conducted on TQM in healthcare facilities of the developed nations, however very few have been done in developing countries. Thiagarajan et al (2001) acknowledges the fact that TQM of the West was deficient of theoretical foundation, citing that TQM essentials and understanding in the less developed economies was quite remote.

The United States was positioned in a low ranking behind several countries on most health outcomes, efficiency, and quality measures. The US physicians often face specific challenges in obtaining timely information, handling administrative hassles, and coordinating care. Some countries have embraced the adoption and implementation of current information healthcare systems, yet the US healthcare facilities and their physicians are still coming into terms with the quest to respond to meaningful financial incentives to help them to implement and effectively use health information technology systems. Enhanced provisions within the Affordable Care Act are aimed to promote efficiency in healthcare delivery and organisation and investment in critical population measures as well as in the preventive ones (Karen et al., 2015).

Drawing references from the context of Asia, the healthcare sector of Saudi has a TQM with strategic measures, particularly the continuous development plans since the beginning of 2000, as outlined by the Ministry of Planning (MOP 2000) which has since then been replaced by the current development plan of 2010 (MOP, 2010). Albejadi (2010), Jannadi, et al. (2008), and Walston, Alharabi, & Alomar (2008) discredit the development of Saudi Arabia's health policy by citing that current studies tend to show that the sector was not spared of some glaring challenges. Much pressure is currently mounted on the need to reduce cost and strengthen efficiency in Saudi hospitals because of its rapidly growing population that currently stands at 3.6 per cent per annum, and this has resulted in the rise in the government expenditure since it

provides free healthcare services to its people (Walston, Al-Harbi & Al-Omar, 2008). Healthcare demand has been on the rise together with the slow pace of creating adequate capacity in hospitals has led to wastage of time before patients receive healthcare services. Indicators tend to show that Saudi shall still need about 25,000 new healthcare facilities such as hospital beds. Expensive equipment presents another operational change. The high cost of equipment needed at the healthcare facilities was blamed on a lack of efficiency and insufficient coordination (Walston et al., 2008). Besides the mounting pressure put by high costs, population of Saudi Arabia tend to have high expectation in the quest to receive quality healthcare services.

In the African context, district hospitals in low-income counties usually have bed capacity that can only accommodate about 60 to 300 inpatients and almost similar numbers of total healthcare staff deployed in such facilities (English et al., 2006). Although these numbers are relatively small, going by standards of hospitals in the developed countries, they have been specifically structured as multiple-serve delivery units. The typical organisation of these healthcare facilities depicts the nature of care given to inpatients and inpatients as well as the type of service, for instance, paediatric or surgical wards. Conventionally, it was a glaring concern that individuals expected to manage such units in the less developed economies mainly pay much attention of technical competence at the expense of important moderators and mediators such as leadership, communication and information dissemination, and supervision that drive effectiveness and quality of healthcare. In the previous discussion, it has been ascertained that such units serve as key attributes towards strengthening interventions needed to improve adoption of recommended practices and undertakings (English et al., 2011).



For the progress to speed up towards the Millennium Development Goals (MDGs), governments of the less developed countries (LDCs) as well as NGOs are putting more resources to strengthen service delivery. Nonetheless, budget allocation in itself is not a good indicator for real quality service delivery or value for money, especially among nations that are characterised by weak institutions. For instance, it was not realistic to depend exclusively on the public sector to address quality issues in situations where service delivery assumes a systematic fashion. Empowering and sensitizing citizens as well as civil society actors was imperative to push governments with the agenda of improving performance and service delivery. Service delivery indicators (SDI), in this context, are the “indicators” project entails the aim to offer such information to the public within Africa (SDI Report Feb 28, 2011).

A World Bank Development Report (1996) affirmed that the health of Nigeria’s population was poor, as is the quality of most of the health services it receives. The report further stated that the health care delivery system needs to be revitalized through a more equitable distribution of health care delivery resource input and a more efficient utilization of those resources. Given this position of the World Bank on the quality of health of Nigerians, there was the need to have a model through which the health care delivery system would be revitalized. The TQM option was considered as a leeway from poor quality service.

Healthcare implementation and provision in Kenya comprises public dispensaries, health centres, provincial hospitals, national referral and teaching hospitals, and district and sub-district hospitals (Wamai, 2009). The provision of health services is done via a set of connections of more than four seven thousand health institutions located in different parts of the country, with the public sector taking the largest portion of these facilities of about 51 percent (GoK, 2005).

Cost constraint constitutes a critical barrier to its entrance in the health systems in Kenya (Turin, 2010). Rationale for measuring quality health care strategies is to establish the link in to quality service delivery and hence better healthcare. Nonetheless, the success of health care strategies was based on the capacity of the implementing health institutions (GoK, 2010).

The adoption of quality management systems in Kenya's referral hospitals has a strong positive relationship with the level of client's satisfaction and to a greater extent with the average rate of mortality and length of stay of in -patients. Quality audits and quality circles, commitment by staff, sensitization and training of staff were noted as critical drivers for quality improvement initiatives. However, are still challenges as staff shortage, inadequate facilities, staff attitude, inadequate funds, poor maintenance of facilities, inadequate computerization of services, slow response by support departments, inability of some patients to pay for services and congestion in the wards. The value of health care services provided to clients translated to better clinical outcomes and client satisfaction which corroborates the efficiency of quality healthcare strategies towards enhancing service delivery at the national referral hospitals (Kinoti & Owino, 2015).

## **1.2 Statement of the Problem**

The delivery of services is one of the key concerns in our public health institutions with a variety of complaints, incidences and concerns by the citizens in Kenya in healthcare services. Improvement in the healthcare service delivery still stagnates despite government measures and efforts from donor countries to finance such services. One of the areas of practice identified as a challenge and a problem has been the implementation of TQM practices to ensure proper service delivery to the public. The adoption of various quality management practices plays a key role in

enhancing health care in public referral hospitals in Kenya, nonetheless there has been slow and inconsistent implementation of such practices. Some of the challenges contributing to this are inadequate funds and staff (Kinoti & Owino, 2015).

Available evidence reveals existence of inefficiency in public health sector in Kenya. This was manifested by the underutilization or malfunctioning of facilities, inefficient utilization of staff and physical capacity, and lack of expenditure containment measures (Akin *et. al.*,1987; World Bank, 1991; Republic of Kenya, 1994 ,1999). The devolution of health services to the County government has further thrown health services to greater mess and poor quality. Most county government was failing in the effective management of healthcare services in the public health facilities. Staff management was weak, facilities suffer poor infrastructure, drugs are not delivered on time, the funds to the facilities was always delayed. It was not clear if the public health centres are able to implement the total quality management practices and the extent to which this has impacted on the services. Notably the hospital leadership was not adequately committed in quality assurance, staff involvement was designing and implementing quality management practices was weak and the concept of continuous improvement was little understood by health personnel (Mwamuye & Nyamu, 2014). The researcher did not come about any study ever conducted to assess the influence of total quality management on service delivery in Kisumu County. The reason motivates this study to investigate the influence of total quality management practices on service delivery of healthcare in public health facilities in Kisumu East Sub-county, Kenya.

### **1.3 Purpose of the Study**

The research project purpose was to establish the influence of total quality management practices on service delivery of healthcare in public health facilities in Kisumu East Sub-county, Kenya.

### **1.4 Objectives of the Study**

The study was guided by the following objectives

- i. To find out the influence of management commitment on service delivery in healthcare in public health facilities in Kisumu East Sub-county, Kenya.
- ii. To determine the influence of staff training on service delivery in healthcare in public health facilities in Kisumu East Sub-county, Kenya.
- iii. To examine the influence of employee involvement on service delivery in healthcare in public health facilities in Kisumu East Sub-county, Kenya.
- iv. To investigate the influence of continuous improvement on service delivery in healthcare in public health facilities in Kisumu East Sub-county, Kenya.

### **1.5 Research Questions**

The research project questions were as follows:

- i. How does management commitment influence the delivery of service in healthcare in public health facilities in Kisumu East Sub-county, Kenya?
- ii. How does staff training influence the delivery of service in healthcare in public health facilities in Kisumu East Sub-county, Kenya?

- iii. How does employee involvement influence the delivery of service in healthcare in public health facilities in Kisumu East Sub-county, Kenya?
- iv. How does continuous improvement influence the delivery of service in healthcare in public facilities in Kisumu East Sub-county, Kenya?

## **1.6 Study Hypotheses**

The below null hypotheses were tested by the study:

- i. There is no significant relationship between management commitment and service delivery in healthcare in public health facilities in Kisumu East Sub-county, Kenya.
- ii. There is no significant relationship between staff training and service delivery in healthcare in public health facilities in Kisumu East Sub-county, Kenya.
- iii. There is no significant relationship between employee involvement and service delivery in healthcare in public health facilities in Kisumu East Sub-county, Kenya.
- iv. There is no significant relationship between continuous improvement and service delivery healthcare in public health facilities in Kisumu East Sub-county, Kenya.

## **1.7 Justification of the Study**

The study findings shall be of benefit to the Ministry of Health (MOH) and the County Government of Kisumu in that they shall have a clear picture about the extent to which total quality management practices have been adopted by public health facilities and the influence this has had on the quality of service delivery. This shall provide a leaning of how to advance their

effort to realize their mandate of having customer focused and quality services in the health sector.

The researcher believed that the study establishments would facilitate a reflection on the quality management practices by the public health facilities in Kisumu County and this shall be the onset of discussions of what to do differently to achieve better outcomes in healthcare service delivery.

It was also hoped that the health-care field shall benefit from expanding the current interpretation of healthcare practices and change and quality improvement in the public health facilities. This study shall also contribute to the body of knowledge and shall serve as critical literature to other researchers who shall seek to study other aspects of quality management both in public and private health facilities.

### **1.8 Basic Assumptions of the Study**

Three major assumptions of the study include; First, that the health facilities are committed to providing quality services to the client and that there are strategies put in place to have this realization. Second that all the employees are part of the quality improvement in healthcare services and are conscious and deliberate in their activities to the extent that they can explain how they contribute to the bigger picture. Third, that the respondent shall be willing to respond to the question and eager to have the findings as part of their assessment to enable them to improve on service delivery.

### **1.9 Limitations of the Study**

One limitation that was foreseen was that the health personnel may not be sincere while responding to the questions because they are obliged to protect the image of their health facility, this was overcome by explaining to them that the study does not seek to fault find but to help them improve service delivery that they provide. Another limitation that was foreseen was that management may not want to give the finer details of the strategies that they use for continuous improvement as to satisfy their clients for the fear that the competitor may learn of them and use them to outwit them. This was overcome by assuring them that the specific details of such strategies were not to be documented with the health facilities name but was to be reported in general. The third challenge that was foreseen was that the lower level management respondents may not be conscious how their individual contribution link to total quality management in their facility and it was overcome by simplifying the questions to capture simple concepts and practices of total quality management that they interact with daily.

### **1.10 Delimitations of the Study**

The focus of the study was on the influence of total quality management practices on the quality of healthcare in public health facilities in Kisumu East Sub-county, Kenya. The four quality management practices that the study concentrated on were management commitment, staff training, employee involvement, and continuous improvement. The study only targeted public health facilities and was done within Kisumu East Sub-county, Kenya in Kisumu County. The study was cross-sectional and was conducted between August and October 2015.

### 1.11 Definition of Significant Terms used in the study.

<b>Total Quality Management</b>	Total Quality Management (TQM) refers to a detailed as well as a structured approach that health facilities leverage on to strengthen the quality of healthcare via refinements that are continuous ongoing refinements in response to feedback that is unending.
<b>Management Commitment</b>	This is the direct participation by the highest-level executives in a specific and critically important aspect healthcare provision. It comprises of constituting and serving on a quality committee, designing and setting up objectives and policies, offering resources as well as training, overseeing implementation in the entire organizational levels, and assessing and revising the policy according to the achieved outcomes.
<b>Staff Training</b>	This is educational preparation provided to staff by the health facility to equip them with modern techniques, tools, strategies and materials necessary for quality improvement for healthcare service provision.
<b>Employee Involvement</b>	This entails bringing employees into decision-making process to have their untapped ideas, innovations, and creative thoughts to improve on service delivery.
<b>Continuous Improvement</b>	An approach to quality management which is based on conventional quality assurance methods by focusing on organisations as well as systems. It also emphasizes on processes rather than individuals by recognizing external and internal clients, supports the demand for objective data for the analysis and improvement of processes.
<b>Service Delivery</b>	A People-centred care that is focused and organized around the health needs and expectations of people and communities, rather than on diseases.



## **1.12 Organization of the Study**

Organization of the study was into 5 chapters. The first chapter comprises of the study background, the study purpose, research objectives, research questions, the study's significance, assumption and definition of significant term and the study organization. The second chapter was comprised of the study review, theoretical framework and conceptual framework. The third chapter describes the research design, Location of study, target population, sample size and sampling techniques, research instruments, validity and reliability of the instruments, data collection procedure and Analysis. The fourth chapter presents analysis of data and their interpretations, discussions were also being done. The fifth chapter provided the summary of research findings makes conclusions and recommendations and offer suggestions for future research.

## **CHAPTER TWO**

### **LITERATURE REVIEW**

#### **2.1 Introduction**

This chapter provides review of empirical literature according to the variables used in the study. Theoretical framework was also presented including ones in which the study was anchored and other theories related to the study. The section also captures the conceptual framework of this study.

#### **2.2 Health Sector in Kenya**

The public health sector comprises dispensaries, health centres, district hospitals, provincial general hospitals, and national referral hospitals. Church-run units and private firms have come in to fill the gaps left by the public institutions. Gaps in the system are filled by private and church-run units. Health services are integrated in a hierarchy fashion of health structure, that was, the district and provincial levels to the national levels (RoK, 2011). As at 2011, there were only 2 referral hospitals in Kenya that included Kenyatta National Hospital in Nairobi and Moi Referral and Teaching Hospital in Eldoret. With devolution in Kenya, most of the counties have improved the structures within the provincial hospitals to match the national standards. According to the CIDP 2014, in Kisumu county there was the Jaramogi Oginga Odinga Teaching and Referral Hospital as the county referral health facility. District hospitals always refer their patients to provincial hospitals that act as their referral hospitals in Kenya also as a bridge between the districts and national levels. Their function is to oversee the health policy

implementation at the district levels, control and coordinate all district health activities, and uphold quality standards (RoK, 2001).

District hospitals focus mainly on the provision of healthcare service delivery as well as creating their own plans for budget requirements and expenditure, following the guideline procedures given by headquarters through different counties. The health centre networks also offer most ambulatory healthcare services. Generally, health centres are known for providing both curative and preventive services, which are often adapted in tandem with the healthcare needs of the locals. Dispensaries are supposed to function as the first line of the system contact with clients, but in some places, hospitals and healthcare centres are effective in areas of their first contact. Dispensaries offer a broad coverage for preventive healthcare, which constitutes the primary goal of the healthcare policy. Privately owned clinics and hospitals as well as those under the management of faith-based organisations supplement the government healthcare service and provide 30% to 40% of all the beds in Kenyan hospitals (RoK, 2010). Based on the levels of their relative advantage, Community-based Organisations (CBOs), Faith-based organisations, and Non-Governmental Organisations (NGOs) perform particular healthcare services (RoK, 2010).

### **2.3 The Concept of Total Service Delivery in Healthcare**

Total Quality Management (TQM) demands a complete paradigm shift in the areas of healthcare management, implying that the organisation has to conform to a total participatory inclusion, continuous improvement, collective responsibility, and flexible plans and objectives. TQM needs a transformation in line with the client's requirements but this excludes the values expected of

the providers. The tool demands an active participation from every individual and a prompt, rational reflex from the senior management towards what the participating personnel has suggested. The clients involved in the TQM comprise families of patients, medical staff, accrediting bodies, government, referring physicians, nurses, and employers. TQM was perceived to be stronger than a change envisioned in values as well as responsiveness required of the senior management. It demands a rigorous and detailed flow of processes and statistical analysis, acknowledgement and application of outlined psychosocial principles that impact on groups as well as individuals in a particular organisation, and assessment of activities that are taking place (Coile, 1990).

Most hospitals have embarked on implementing TQM programmes and succeeded, and this has been witnessed in the case of St. Marys (Grand Rapids, Michigan). Motwani et al. (1999) undertook a case study for about one year and ascertained a number of success factors associated with the TQM implementation in hospitals. Firstly, an organisational structure is combined with the commitment of leadership for process identification and improvement. Secondly, the application data-based statistical as well as the analytical tools that facilitate study processes. Thirdly, it creates room for employee empowerment. Fourthly, it creates the improvement process that ensures that both external and internal customers are fully involved. Finally, it creates room for the creation of efficient measures that facilitates the improvement of monitoring. The researcher concludes that the implementation of TQM has created remarkable benefits.

## **2.4 Managerial Commitment and Service Delivery.**

Management leadership as well as quality assurance is conventionally perceived to a powerful force, among others, which is responsible for driving quality management (Schalk & Dijk, 2005). The scenario has also been exhibited within the sector of healthcare and this was evident in both departmental and top organisational levels (Shalliams, 1994). Management implements the pressing healthcare needs of the community in line with the quality obligation and the quest to handle the organisational culture. Organisational context was known to be supported through quality assurance and management leadership that result in high organizational performance, organisational learning, and the development of individuals.

Management was responsible for driving the implementation of TQM, developing goals, systems, and values aimed at satisfying the expectations of customers and improving the performance of a particular organisation (Juran, 1988: Dale & Plunkett, 1990: Ahire, Golhar & Waller, 1996: Huq, 2005: Rad, 2006). They are also accountable for the encouragement and path to be followed given to a specific organisation (Walsh *et. al.*, 2002). The commitment of management was imperative in ensuring that there was quality development, its support and contributions, benchmarking, and adequate resource-allocation that enhance better quality that translates to improved customer satisfaction. To this end, hospital directors may be compelled to face normative pressures for them to embrace and implement practices that support innovative management, for example, the TQM (Huq, 2005: Taylor & Wright, 2003).

Hanson (2001) examined different facets of the implementation of TQM in small-sized organisations in the context of Sweden. The study by this researcher focused on the benefits of

active leadership and engagement of employees. The research established the small-sized organisations were facing a myriad of challenges in the processes of orientation, particularly the ones that experienced obstacles in fact-based decision implementation as well as the continuous improvement. Evidently, the findings obtained by the researcher showed that employee commitment, leadership, and client focus had dominated the organisations that were involved in the survey.

On several occasions, it was seen that organisations that embrace TQM programmes do so but fail to continue persisting to the implementation phase (Venkateswarlu & Nilakant, 2005). The researchers examine factors responsible for affecting the continuity as well as the success of TQM programmes in a number of organisations located in New Zealand. The conclusion made from the assessment was that there are certain factors that drive the continued pursuance of TQM programme implementation, including core philosophy, change compulsions, experience, capability, commitment from top management, TQM champion fit, leadership continuity, and collateral changes. Organisational leadership and commitment of management are seen as critical elements that facilitate the implementation of TQM. Notably, the literature fails to show the existing distinction between leadership and commitment. Guillen and Gonzalez (2001) conform to the claim that the two concepts may be related to some extent but are not the same in meaning and context. Precisely, the term “commitment” exhibits a narrower scope than the term “leadership”. Drawing reference findings from 3 similar studies, it has been proved by the researchers that in the context of TQM implementation within a company, management leadership could be employed as an explanatory variable.

Alexander and Lee (2006) conducted a study to investigate whether governance matters, by drawing specific reference to the board configuration as well as the performance of not-for-profit hospitals. In that particular study, governing boards of hospitals were grouped as either corporate or philanthropic, while corporate models assumed a more active role in management. About 1,000 boards of hospitals were grouped into these classes and compared the two clusters according to operational, strategic, and financial performance. Models of corporate governance enhance more admissions, better efficiency, and capturing of bigger market share. The findings reveal that a board structure which exhibit either a corporate or philanthropic characteristic may have critical influence on the performance of hospitals. However, further research may still be required in this area to ascertain whether the different board structures have same influence on the quality of care.

Vaughn Koepke, Kroch, Lehrman, Sinha, and Levey (2006) studied leadership involvement in the improvement of quality initiatives. The team of researchers compounded the results and compared the findings with a survey conducted on executives (senior management) drawn from 413 from different states with quality performance measures ascertained with the aid of Care Science Quality Index (CSQI). Factors linked to better quality comprised spending more than 25 percent of the board's time on aspects of quality, employing formal tools of stepping up engagement with the medical workforce, compensating the top management for quality achieved, and dashboard. The findings agree with previous studies and offer top management and trustees with effective and efficient strategies to enhance the management of quality.

Ozcan and Hornby (2005) conducted a study on ascertaining staff needs in hospitals and revealed that in Turkey, one of the causes of poor performance among the medical staff in government

hospitals was a lack of interest of managers and departmental heads to provide favourable work conditions and to incentivize their subordinates. The study therefore suggested for the adoption and implementation of rewards and incentive system for nurses and medical staff who show outstanding performance every month to serve as role models for other staff members. The exemplary group was also to be awarded special bonuses to motivate them and to encourage others who failed to make it to the selection category to work extra hard. The adoption of this system is thus viewed as key in improving performance of employees working in the hospital.

### **2.5 Staff Training and Service delivery.**

Training was crucial in the development and promotion of skills associated with organisational values and beliefs to transform to a culture that puts much value on quality. Rad (2005) points out that organisation needs to train its workforce, once the management has been equipped with necessary skills to steer the TQM process, to make sure there was an integrated, systematic, and consistent effort throughout the organisation. The researcher also emphasises for continuous improvement and learning to instil a positive culture that encourages adequate behavioural modification to streamline sustainable TQM. According to (Taylor & Wright, 2003), one of the vital undertakings in support of climatic change within an organization was through impacting skills that are more of problem solution to employees.

Education and training have also been shown as imperative towards the support of TQM implementation. The same view was upheld by five previous researches. The practice shows the capability of the organisation to utilize quality management techniques as well as tools (Wardhani, Utarini, van Dijk, & Post, 2009). It comprises of management training, technical



support, employee training, controls of statistical processes, information system, and scientific-problem solving techniques. The success of TQM generally relies on continuous training and education of personnel of all cadres (Brashier et al., 1996). Technical training also aims at meeting the requirements of high performance at the workplace since it influences employee safety and efficiency. Moreover, the workforce has to be trained on the usage of statistical approaches to enhance better management quality (Mahadevappa & Kotreshwar, 2004). Hence, employee education and training are crucial drivers for TQM implementation.

Salah Mahmoud Diab (2012) conducted a study on quality dimension measurements of medical services the Jordanian government hospitals offer from the view of staff and patients. The study showed that training courses are essential for employees in hospitals so that the quality of medical services can be achieved. This was imperative in achieving quality to high degree among both patients and the medical fraternity.

## **2.6 Employee Involvement and Service Delivery**

Employee engagement was an important element of the TQM implementation. TQM demands total commitment on the side of management to encourage the workforce to pursue a culture of quality work that leads to the development of a desirable corporate image through the provision of quality services to clients (Schalk and Dijk, 2005; Huq, 2005). Strengthened employee engagement in the total quality approach creates an increased flow of knowledge and information and leads to the wellbeing of the organisation towards problem solving. For example, among employees and staff, the main objective of TQM was the widening of job responsibilities.

A high engagement level constitutes a strategic goal that steers the growth of several organization in most organisations such as healthcare. Involved employees are seen to be committed towards their employer, are often satisfied in their areas of work, and are ready to provide extra effort towards the attainment of organisational goals. Research evidence show that involvement affects some other major goals of human resources such as job performance, retention, recruitment, and absenteeism (Macey & Schneider, 2008: Gibbons & Schutt, 2010).

Engaged and healthy workforce was a characteristic of a highly performing organisation. The work environment was created in a way that facilitates utilization and development of the capacity of individuals needed to reach one's desired goal. In this regard, a culture that places value on devotion of leadership and that of employees that support organisational goals and systems offer conducive environment for staff and employees to excel (Lowe, 2010). The above assertions have gained ground in the health-care setting and currently transforming at a rapid pace. For instance, the United States Joint Commission on the Accreditation of Healthcare Organisations associate healthy workplaces and high-quality healthcare as a healthy work environment in which employees and staff deliver high quality care and in which the value of the care given to the patient and the workers' health are seen to be mutually supportive. This implies that both emotional and physical health of workers promotes quality care, and on the same note, the capacity to provide high quality care promotes health of workers (Eisenberg et al., 2001).

Positive correlation between patient satisfaction and client satisfaction was also supported by private sector research indicating strong relationship between customer experience and workforce engagement scores (Heskett et al., 2008: Harmon & Behson, 2007). Some of the recent studies in healthcare also show that managers can retain and encourage staff satisfaction

as a way of promoting patient-care (Collins et al., 2008: Rondeau & Wagar, 2006: Sikorska-Simmons, 2006: Michie & West, 2004). A research survey conducted in National Health Service documents of England indicates that hospitals with high staff engagement levels have higher financial performance that was attributed to the great value of service they offer (West et al., 2011).

Debra et al. (2008) studied the role nurses play in enhancing quality improvement in hospitals and realised another glaring challenge that hospitals encounter was that the management tend to overburden their staff and employees with a lot of work. For example, the same nurses required to attend to patients at their bedsides are also the ones needed to lead their activities on quality improvement. The same problem possesses more challenge to the nursing fraternity, especially when the nurses are few. Variety of the respondents cited that an attempt to bring an equilibrium between the nurses at the sides of the beds with their engagement in the activities of eminence improvements has often led to the nursing fraternity receiving mixed information regarding the role they are expected to play in the quality improvement.

## **2.7 Continuous Improvement and Service delivery**

Continuous improvement was strongly correlated to the pursuance of longstanding improvement in the achievement of both internal and external needs (Schalk & Dijk, 2005: Taylor & Wright, 2003). Kanji (1998) posits that continuous improvement demands management to encourage synergy by involving all the employees to work as a team and this to follow a bottom-up approach for the improvement of quality. According to Hughes, 2002 Continuous improvement was viewed as a philosophical approach towards the improvement of activities that prevent cases

of failures and increases chances of success. They have to be fully integrated in all processes and systems management (Vouzas, 2007).

According to Edwards (2008) CQI was simply a philosophy that motives all members of the healthcare team to continue questioning, “how they are doing” and “how they can perform it better” They look for answers “how they can efficiently execute a given task, whether it was possible to do it with speed and the possibility of carrying it out timely”. Continuous improvement starts as a culture that drives improvement for practice, patients, and the entire population.

In addition to developing the inquisitive culture of the CQI within a specific organisational environment, the essence of a given CQI initiative framework was the application of a well-thought-out planning strategy for the assessment of the present undertakings not forgetting practices with an aim to developing and strengthening systems to the intended result and vision of the desired future. Commonly applied tools comprise approaches that provide opportunity for team members to evaluate and strengthen healthcare delivery services (Edwards, 2008).

Leaders have to assume a leading role in the improvement of quality. The initiative demands that professions within the healthcare institutions and those who speak on behalf of the large-scale healthcare consumers are required to hold and share the same vision regarding a healthcare system that was being subjected to a continuous improvement. The detriments grounded in the accusations as well as defence must be replaced at the onset by clarifying missions, goals, and procedures of the implementation and improvement healthcare agenda, by focusing on even making it better (Berwick, 1989).

Significant amount of investment was deemed necessary for the improvement of quality. In certain industries, quality improvement has resulted in cost reduction and high amounts of dividends that are also experienced in the sector of healthcare. In the meantime, improvement demands some more investments in time management, technical expertise, and capital. With the currently high discount rate put on healthcare planning, the intended levels of investments need a strong long-term vision. Investments in areas of study and education to aid the understanding the complexity of production processes of healthcare, which must be understood before embarking on the strategy to improve the same (Kanji, 1998).

Respect accorded to healthcare worker needs to be re-established as hospital staff, physicians, and healthcare workers have to be perceived as working hard and acting with absolutely and in good faith in executing whatever they are required to do. When exposed to complex systems, specifically in the executing of certain complex tasks in the course of their clinical mandates, they need not be scared in performing tasks better. Fear takes a centre stage at the point the clinicians feel that they are wasting their productive time to engage in self-defence instead of using the same in learning (Schalk & Dijk, 2005).

Dialogue between healthcare suppliers and customers needs to be transparent and well maintained. Incentive towards quality should be devoid of threat exposed to one's business as this tends to derail a long-term relationship. Quality can only be realised when both the customer and supplier create an enabling environment and take time to listen to each other. In general, healthcare improvement cannot be achieved under conditions of prevailing threats (Berwick, 1989).

## **2.8 Theoretical Framework**

Total quality management was widely acknowledged as a strategic towards the management of organizations that leads to better performance. In the past thirty years, organisations throughout the developed economies have strongly advocated for and pursued quality management because it was perceived that products and services that are of great value often gives direction to improved financial performance. This study was anchored on two theories: the systems theory and the theory of psychology.

### **2.8.1 The systems theory**

The systems theory was proposed in the 1940's by the biologist Ludwig von Bertalanffy. The postulator noted that organisations work as systems. A system is a network of function components that are interdependent and synergistic and which, taken together, can attain clearly stated goals. The system makes its boundaries explicit by defining which people, functions, components and aims are included and which are not. The components must serve the total system, not the individual components themselves.

Managers work on the system to attain the total system's aims (to optimise it) and the workforce works in the system. Effective communication and common understanding about roles and responsibilities is key to the optimisation of the system. When one component, function, or subsystem benefits without concern for the impact on the total system, then the total system is sub-optimised. The aim of the system must be clear to all and consistent with the needs of the 'system's customers. Each component has suppliers and customers within and/or outside the

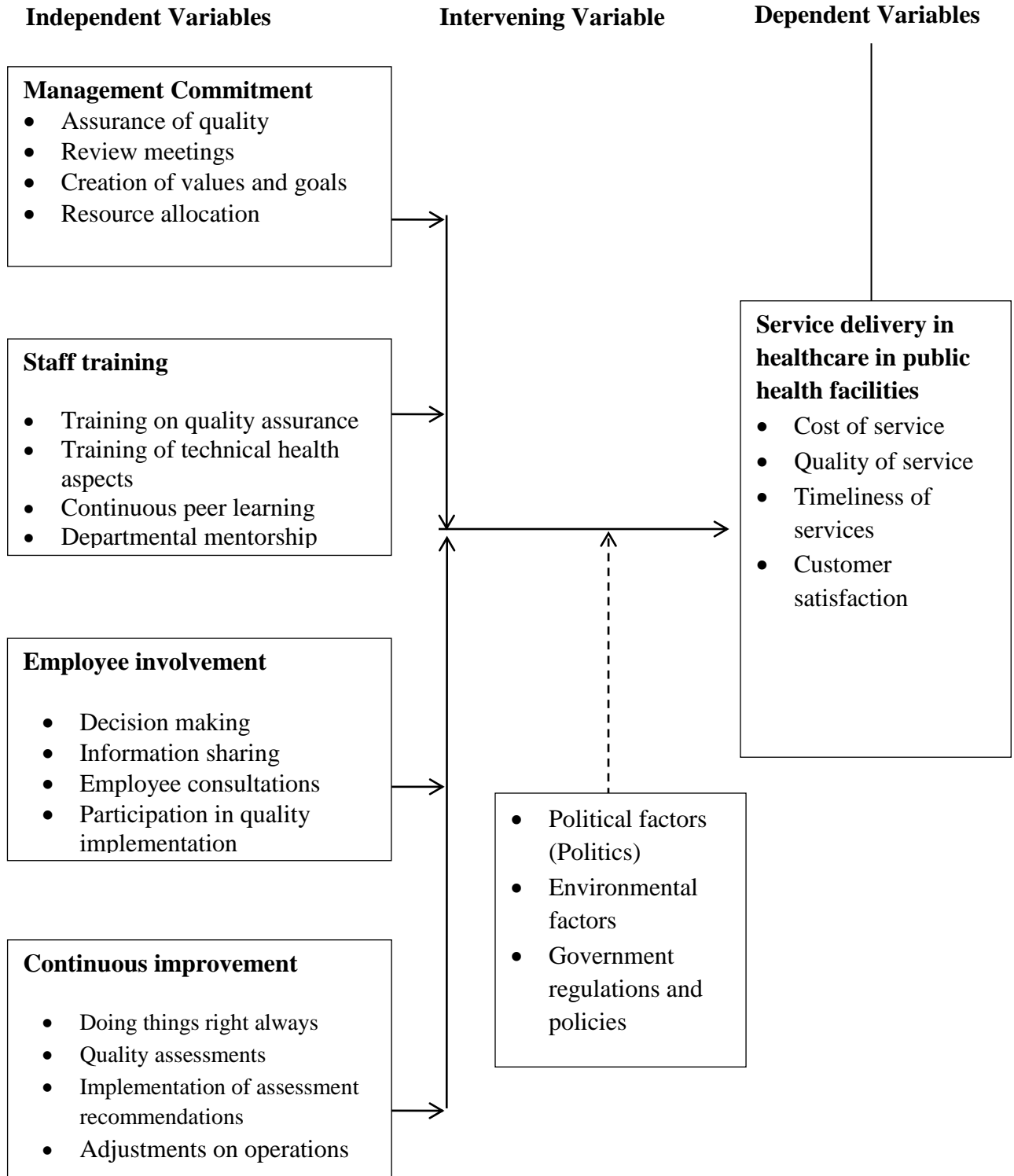
system. This theory is important for this study because for total quality to be realized, all the departments in each facility must function effectively while complementing one another.

### **2.8.2 Theory of psychology**

This theory was formulated by Van der Westhuizen (2002), he noted that it is paramount to understand the interactions between people and their behaviour since management implies that people are motivated. The theory of psychology suggests that intrinsic motivation is superior to extrinsic motivation. External motivators, such as merit pay and/or punishment may control behaviour in the short term, but they do not contribute to the improvement of the system over the long term. People are in need of fun, freedom, belonging, success, recognition and joy and positive, honest, direct reinforcement can motivate them better than fear. Over-justification in the form of unsought and unnecessary awards, however, can be insulting and de-motivating. Individual differences are always present in the ways in which people learn and in the speed with which they learn. Fear can exercise a negative effect on the behaviour of people and can therefore affect the quality of their work.

Attention to psychological principles provides opportunities to improve inputs, processes and outputs. The emphasis on intrinsic motivation and the honouring of individual differences are relevant to manager and junior staff in the hospitals. This theory is relevant to the study because management commitment to enhancing quality of healthcare should go a long way in creating a conducive environment for the staff to perform. Additionally, staff training and their overall involvement on service delivery in healthcare would enhance their contribution towards the quality of service delivery.

## 2.9 Conceptual Framework



**Figure 2.1: Conceptual framework**



## **CHAPTER THREE**

### **RESEARCH METHODOLOGY**

#### **3.1. Introduction**

This chapter presents a detailed description of research design, the target population, the sample size and procedures of sampling, research instruments, data collection procedures, data analysis techniques and ethical considerations.

#### **3.2 Research Design**

This research study employed descriptive survey research design method. According to Bowling, (1999) the survey research gives room for collecting information that is factual and of detail. The survey research gives a description of phenomenon that exists and justifying present conditions and undertakings. This design is suitable for the study because it allows the researcher gather factual and detailed information, summarizing, presenting and interpreting it for the aim of clarification. It also enabled the researcher to seek people's opinions, attitudes concerning influence quality management practices on the efficiency of healthcare services in public health facilities in Kisumu East Sub-county, Kenya.

#### **3.3 The Target Population**

This refers to every individual of a real set or of group of subjects to which a researcher has got the wish to give a general result from the study (Borg and Gall, 1989).Kisumu Town East Sub-county has locational 5 wards : Kajulu, Kolwa East, Manyatta B, Nyalenda A and Kolwa Central

and covers 135.90 square metres, the sub-county is home to 150,124 people (Kenya Bureau of Statistics,2009).According to the Ministry of Health report on assessment report for hospitals in September 2016 Kisumu East Sub-county, Kenya has 13 health facilities which formed the target population in the study. The medical personnel who were targeted at the health facilities are: The facility doctor/nurse in-charges, Pharmacy technicians, Laboratory technicians, Nurses.

### **3.4 Sampling, Sample Size and Sampling Techniques**

#### **3.4.1 Sample Size**

The study did a census on all the 13 health facilities because the number is less than 30 within Kisumu East Sub-county, Kenya. The researcher picked 4 respondents from each facility: 1 facility doctor/nurse in-charges, 1 Pharmacy technicians, 1 Laboratory technicians and 1 Nurses. This is because most health facilities have just one for the targeted personnel except for the nurses who were be between 1 and 5 in number. For referral facility, Kisumu Sub-county hospital, the researcher picked 8 respondents, that is, two from every department. The list of facilities visited is attached in appendix 3.

**Table 3.1:Table showing sample size**

<b>Designation/profession</b>	<b>Number of personnel</b>
Health Facility in charge	13
Clinical Officer	24
Lab Technician	13
Pharmacy Technician	14
Nurses	82
<b>Total</b>	<b>151</b>

### **3.4.2 Sampling Procedure**

The study applied both purposive sampling and simple random sampling techniques. The purposive sampling techniques were employed to pick the 1 facility doctor/nurse in-charges, 1 Pharmacy technicians and 1 Laboratory technician because most public health facilities just have one personnel in that position. Simple random sampling was employed to pick one nurse of the 1-5 that work in those health facilities. This gave an equal chance of being picked to participate in the study for all the nurses.

### **3.5. Research Instruments**

The study used questionnaires for collecting data. Studies by (Bowling, 1999) revealed that the use of questionnaire in undertaking a survey were the best instrument for data collection since researches are normally undertaken in natural settings, questionnaire gives an increase to the external study validity. Development of the questions was pillared on data siphoned out of quality literature of management practices in hospitals. Choice of the tool was in guidance of the make-up of the to-be-collected data, availability of such data as well as the objective of the study. The questionnaire was used since the study is concerned mainly with variables which could not be observed directly such as views, opinions and the population is literate and did not have difficulty in responding to the questions. The questionnaire has five sections, section A is on Demographic data, section B is on management commitment and quality of healthcare services, section C is on staff training and quality of healthcare services, Section D is on employee involvement and quality of healthcare and section E is on continuous improvement and quality of healthcare services.

### 3.5.1 Pilot testing of Questionnaires

Piloting is a mini or preliminary study undertaken to find out questions that do not don't make any sense to participants, or any issues with the questionnaire that could in one way or the other lead to biased answers. Pre-test a sample should be between 1% and 10% of the study sample size (Mugenda & Mugenda, 2003). Respondents during the pilot testing were picked from the nearby Kisumu Central Sub-county.

**Table 3.2:Sample for pilot testing of questionnaire**

<b>Designation/profession</b>	<b>Number of personnel</b>
Health Facility in charge	1
Clinical Officer	3
Lab Technician	1
Pharmacy Technician	2
Nurses	8
<b>Total</b>	<b>15</b>

### 3.5.2. Validity of the Instruments

The validity of the instruments was achieved by giving the questionnaires to two health personnel and university lecturers to aid in the vetting to make sure that they were appropriate, relevant and clear, adequate coverage of the research objectives and peer review. This aided in making sure that the content of the instruments was valid. The researcher liaised with the supervisors to discuss the instruments to enhance their validity. Items that were not clear were to be modified or removed all together.

### **3.5.3 Reliability of the Instruments**

Test-retest was used to measure the reliability on the questionnaires to the population that had been sampled after revising and validating the research instruments. Here the research instrument was administered to the same respondents two times. After the first administration, it was repeated after two weeks, this was long enough to eliminate respondents by remembering the responses given in the first round. The score on the two sets of measures were then correlated to obtain an estimated coefficient of reliability. The coefficient was computed using the Spearman rank order correlation and established to be  $r=0.81$ . According to Orodho (2009), a positive correlation coefficient for the questionnaire of over (r) 0.75 is judged high enough to consider the instrument reliable.

### **3.6 Data Collection Procedures**

McMillan and Schumacher, (1993) opine that it was be prudent to acquire consent from relevant authorities before kicking off collecting data. The research permit from the National Committee of Science, Technology and innovation, a letter of transmittal was also obtained from the University of Nairobi and a subsequent one from the Sub-County Health Officer of Kisumu East Sub-county, Kenya. Upon visiting the health facilities, the respondents were identified, introduction about the study was done and their informed consent to participate in the study was sought. Every instruction on how to complete the questionnaire were made clear to the respondents. The researcher dropped the questionnaire and makes an appointment to pick the questionnaires after two days. Upon the third day after delivering the questionnaire the researcher visited the respondents and picks the questionnaires. On-spot checks was done to the

questionnaires to confirm whether they are completed well and accurately. Any question or clarification was done on any answer that is not clear. The researcher thanked the respondent for having participated in the study upon verifying that everything is fine.

### **3.7 Data Analysis**

Once data was collected, it was checked for completeness, edited and cleaned. This involved making call backs for the questionnaires not filled in correctly. Coding of data from the quantitative data from the questionnaires was done before being entered into the Statistical Package for Social Sciences (SPSS) software for analysis. Quantitative data was analysed using frequencies and percentages with inferential statistics. Chi-square was applied to test the connection between the variables and the tested data.

### **3.8 Ethical Considerations**

Mulwa (2006) describes ethical standards of behaviour as practical procedure that researchers are expected to follow. Saunders, Lewis and Thornhill (2007) on the other hand relates research ethic to questions about how research topic is formulated and clarified, how research is designed and finally how researcher gains access, collect data, process, store and write up findings in a moral and responsible manner. The researcher got the first authority from the department through which it enabled access to test-retest the questionnaire. The introductory letter from the university together with the research proposal was submitted the National Committee of Science, Technology and Innovation to give authority to conduct research. Further to this was the authority from the Ethics and the Research Committee which regulates research and ensure adherence to ethical principles in order to safeguard the dignity, safety, rights of the patients or

participants. The authority from the Kisumu county health ministry was also awarded. Communication was also physically passed to facility in charges on prior communication to the stakeholders. All the ethical aspects of research, which include getting informed consent of respondents to participate in the research, ensuring anonymity, privacy and confidentiality, was observed.

## CHAPTER FOUR

### DATA ANALYSIS, PRESENTATION AND INTERPRETATION

#### 4.1 Introduction

This section analyses the data, interprets it and discusses it in light of empirical literature. This section comprises the questionnaire return rate, demographic information, management commitment and service delivery in healthcare in public health facilities, Staff training and service delivery in healthcare in public health facilities, employee involvement on service delivery in healthcare in public health facilities and continuous improvement on service delivery in healthcare in public health facilities.

#### 4.2 Questionnaire Return Rate

The research computed the questionnaire return rate and the findings presented in Table 4.1

**Table 4.1: Age of the respondents**

Sample size	Respondents interviewed	Percent
151	143	94.7%

The questionnaire return rate was 94.7%, this was represented by 143 respondents reached out of the 151 respondents targeted in the study. The response rate was considered good enough for analysis and reporting. A response rate of 50% was considered adequate for analysis and reporting, 60% is good and that of 70% and above is very good (Mugenda & Mugenda, 2003).



### 4.3 Demographic Information

This section analyses, presents and interprets the results findings on the level of health facility, level of education of the respondents, designation, age, time period worked in current position, duration worked in the facility and the strategies put in place for quality health services in the facility. The findings were presented in Table 4.2

**Table 4.2: Demographic Information**

<b>Variable</b>	<b>Categories</b>	<b>f(%)</b>
Level of health facility	Level 3	31(21.68)
	Level 4	112(78.32)
Level of education	Post-secondary	38(26.6)
	Diploma	48(33.6)
	Degree	57(39.9)
Respondent's designation	Health Facility in charge	10(6.99)
	Clinical Officer	24(16.78)
	Lab Technician	13(9.09)
	Pharmacy Technician	14(9.79)
	Nurses	82(57.34)
Respondent's Age	18-27	38(26.6)
	28-37	67(46.9)
	38-47	32(22.4)
	48-57	6(4.2)
Period worked in the position	1-3	121(84.6)
	4-6	12(8.4)
	9-12	6(4.2)
	13-15	4(2.8)
Duration worked in the facility	1 year	79(55.2)
	2 years	32(22.4)
	3 years	26(18.2)
	5 years	6(4.2)

The respondents were able to state the level of health facility where they were working, majority of the respondents worked in level 4 at 112(78.32%) with the minority working in Level 3 facilities 31(21.68%). This was a good representation as the different levels of facilities are at various levels in the implementation of the total quality management approach. Preponderance of the respondents at 57(39.9%) had attained degree certificate, 48(33.6%) diploma with the least

number of respondents at 38(26.6%) having attained post-secondary certificate. This was an indication that all the respondents could comprehend and respond to the questions accurately.

Majority of the respondent the respondents were nurses at 82(57.34%), clinical officers were 24(16.78%), 14 (9.79%) were Pharmacy Technician. Laboratory technicians formed 13(9.09%) while the least were Health Facility in charges at 10(6.99%). The distribution among the various health practitioners added value to the study in that they play different roles, all which contribute towards the attainment of total quality management standards.

More than half of the respondents at 67(46.9%) were between 28-37 years of age, 38(26.6%) were between 18-27 years, 32(22.4%) were between 38-47 years with minority of the respondents at 6(4.2%) aged between 48-57 years old. Majority of the respondents were youthful and this meant that they were energetic and would make very valuable contribution towards the implementation of the total quality management approach to healthcare.

On the periods the respondents have been in the designated position, preponderance at 121(84.6%) had taken between 1-3 years in the given position, 12(8.4%) between 4-6 years, 6(4.2%) between 9-12 years as the minority at 4(2.8%) between 13-15 years in the given position. On average each respondent had been in their current position for a period of 2.44 years (SD= 2.440).It was therefore evident that each of the respondent had been in their current position long enough and understood the TQM approaches applied to enhance healthcare.

The respondents were able to indicate the duration worked in the given facility, more than half of the respondents at 79(55.2%) had worked for a year, 32(22.4%) for 2 years, 26(18.2%) for 3 years as the least number of respondents at 6(4.2%) worked for 5 years. It was typical that the respondents had worked at the current facility for 1.76 years (Mean=1.76).

#### **4.4 Managerial Commitment and Service delivery in Public Health Facilities**

This section analyses, interprets and presents findings on the first objective of the study: To examine out the influence of management commitment on service delivery in healthcare in public health facilities in Kisumu East Sub-county, Kenya. The respondents were given several 5

point Likert Scale questions to respond to 1-Strongly Disagree,2-Disagree, 3-Neutral,4-Agree and 5-Strongly Agree; the means were calculated and interpreted . The results are as shown in table 4.3

**Table 4.3: Views on Managerial Commitment and Service Delivery**

<b>Statements</b>	<b>SA</b>	<b>A</b>	<b>N</b>	<b>D</b>	<b>SD</b>	<b>Mean</b>	<b>SD</b>
	<b>f (%)</b>	<b>f(%)</b>		<b>f(%)</b>	<b>f(%)</b>		
The health facility in-charge committed to enhancing quality of healthcare in the facility	32(22.4)	105(73.4)	6(4.2)	0(0.00)	0(0.00)	4.18	0.484
The management board committed to enhancing quality of healthcare in the facility	32(22.4)	95(66.4)	0(0.00)	12(8.4)	4(2.8)	3.97	0.903
The health facility management team hold meeting to discuss quality issues	32(22.4)	97(67.8)	4(2.8)	6(4.2)	4(2.8)	4.03	0.822
The organization’s management supports high organizational performance, individual development, and organizational learning	32(22.4)	91(63.6)	0(0.00)	16(11.2)	4(2.8)	3.92	0.96
<b>Mean of mean</b>						<b>4.025</b>	

Nearly all the respondents at 137(95.8%) stated that the health facility in-charges were committed to enhancing quality of healthcare in the facility with the least respondents at 6(4.2%) being undecided. With a mean of 4.18 (SD= 0.484) this implied that the health facility in-charges were committed to enhancing quality of healthcare in the facility.

Majority of the respondents at 127(88.8%) noted that management board was committed to enhancing quality of healthcare in the facility while the minority at 16(11.2%) stated that the management board was not committed to enhancing quality of healthcare in the facility. At a

mean of 3.97 (SD= 0.903), it was commonplace that the management board was committed to enhancing quality of healthcare in the facility.

Majority of the respondents at 129(90.2%) stated that the health facility management team held meetings to discuss quality issues, 10(7.0%) stated that it did not while the least number of respondents at 4(2.8%) were unsure whether the health facility management team held meetings to discuss quality issues or not. The item mean =4.03 (SD= 0.822) meant that the health facility management team held meetings to discuss quality issues.

More than three quarters of the respondents stated that the organization's management supported high organizational performance, individual development, and organizational learning as the minority at 20(14.0%) held divergent opinion. It was typical that the organization's management highly supported organizational performance, individual development, and organizational learning, mean = 3.92 (SD= 0.560).

#### 4.4.2 Correlation between managerial commitment and service delivery in public healthcare facilities

The study conducted a correlation analysis using Spearman's Rho to test the association between managerial commitment and service delivery. The results were as shown in Table 4. 4

**Table 4.4: Correlation between managerial commitment and service delivery in public healthcare facilities**

		Managerial Commitment	Service Delivery
	Correlation Coefficient	1.000	.588**
Spearman's rho	Managerial Commitment Sig. (2-tailed)	.	.000
	N	143	143
	Correlation Coefficient	.588**	1.000
Service Delivery	Sig. (2-tailed)	.000	.
	N	143	143

The findings showed that there is a significant moderate positive relationship between managerial commitment and service delivery  $r=0.588^{**}$   $p<0.05$ . This meant that enhancing the managerial commitment to total quality management would enhance the quality of service delivery in public health facilities in Kisumu East Sub-county, Kenya.

#### 4.5 Staff Training and Service Delivery in Public Health Facilities

This section presents the findings, interprets and discusses the findings on the second objective of the study: To determine the influence of staff training on service delivery in healthcare in public health facilities in Kisumu East Sub-county, Kenya. The respondents were given several 5-point Likert Scale questions to respond to 1-Strongly Disagree,2-Disagree, 3-Neutral,4-Agree and 5-Strongly Agree; the means were calculated and interpreted. The results are as shown in Table 4.5

**Table 4.5: Views on Staff Training and Service Delivery in Healthcare**

<b>Statements</b>	<b>SA</b>	<b>A</b>	<b>N</b>	<b>D</b>	<b>SD</b>	<b>Mean</b>	<b>SD</b>
	<b>f(%)</b>	<b>f(%)</b>	<b>f(%)</b>	<b>f(%)</b>	<b>f(%)</b>		
I have had training on how to enhance quality of healthcare in the facility	36(25.2)	95(65.0)	8(5.6)	6(4.2)	0(0.00)	4.11	0.683
Training me and other health staff in the facility is fundamental for the successful implementation of TQM	40(28.0)	73(72.0)	0(0.00)	0(0.00)	0(0.00)	4.28	0.45
There is continuing education and technical training on quality improvement of healthcare for all levels of personnel	44(30.8)	95(66.4)	4(2.8)	0(0.00)	0(0.00)	4.28	0.509
The training I got on quality healthcare has contributed greatly in enhancing the quality of healthcare at the facility	44(30.8)	89(62.2)	4(2.8)	6(4.2)	0(0.00)	4.2	0.684
<b>Mean of mean</b>						<b>4.217</b>	

More three quarter of the respondents at 129(90.2%) had training on how to enhance quality of healthcare in the facility, 8(5.6%) were undecided while the minority at 6(4.2%) had never had

training on how to enhance quality of healthcare in the facility. It was commonplace that training on how to enhance quality of healthcare in the facility was largely implemented, mean =4.11(SD= 0.683).

All the respondents at 143(100%) stated that training them and other health staff in the facility was fundamental for the successful implementation of TQM, mean = 4.28 (SD= 0.450). Nearly all the respondents at 139(97.2%) stated that there was continuing education and technical training on quality improvement of healthcare for all levels/cadres of personnel as the least at 4(2.8%) were unclear on the statement. It was therefore typical that continuing education and technical training on quality improvement of healthcare for all levels of personnel was largely adopted in the public health facilities, mean= 4.28, SD= 0.509.

It was popular among 133(93.0%) that the training they got on quality healthcare had contributed greatly in enhancing the quality of healthcare at the facility, 6(4.2%) stated that the training did not contribute in enhancing the quality of healthcare at the facility while the minority at 4(2.8%) were uncertain. This gave an indication that that the training on quality healthcare had contributed greatly in enhancing the quality of healthcare at the facility, mean = 4.20 (SD= 0.684).

#### 4.5.2 Correlation between staff training and service delivery in public health facilities

The study conducted a correlation analysis using Spearman's Rho to test the association between staff training and service delivery in public health facilities. The results were as shown in Table 4.6

**Table 4.6: Correlation between staff training and service delivery in public health facilities**

			Service Delivery	Staff Training
Spearman's rho		Correlation Coefficient	1.000	.473**
	Service Delivery	Sig. (2-tailed)	.	.000
		N	143	143
		Correlation Coefficient	.473**	1.000
	Staff Training	Sig. (2-tailed)	.000	.
		N	143	143

It was established that there was a significant moderate positive relationship between staff training and service delivery  $r=0.473^{**}$ ,  $p<0.05$ . This meant that that strengthening staff training would lead to an improvement in service delivery at the public health facilities in Kisumu East Sub-county, Kenya.



#### 4.6 Employee Involvement and Service Delivery in Public Health Facilities

This section analyses, interprets and presents findings on the third objective of the study: To examine the influence of employee involvement on service delivery in healthcare in public health facilities in Kisumu East Sub-county, Kenya. The respondents were given several 5-point Likert Scale questions to respond to 1-Strongly Disagree, 2-Disagree, 3-Neutral, 4-Agree and 5-Strongly Agree; the means were calculated and interpreted. The results are as shown in Table 4.7.

Table 4.7: Views on employee involvement and quality of healthcare

Statements	SA	A	N	D	SD	Mean	SD
	f(%)	f(%)	f(%)	f(%)	f(%)		
Staff are involved in the formulation of the quality improvement plans	40(28.0)	91(63.6)	0(0.00)	4(2.8)	8(5.6)	4.06	0.948
Staff are involved in the day to day decision making in the health facility	36(25.2)	79(55.2)	0(0.00)	24(16.8)	4(2.8)	3.83	1.075
Information on quality improvement is shared with all staff in the facility	36(25.2)	89(62.2)	0(0.00)	18(12.6)	0(0.00)	4.42	2.71
All employee are of consulted whenever on the quality gaps that exist in the provision of healthcare	36(25.2)	89(62.2)	4(2.8)	14(9.8)	0(0.00)	4.03	0.822
Employee involvement is a critical component during the implementation of total quality management	50(35.0)	89(62.2)	0(0.00)	4(2.8)	0(0.00)	4.29	0.615
<b>Mean of mean</b>						<b>4.126</b>	

Majority of the respondents at 131(91.6%) stated that staff were involved in the formulation of the quality improvement plans, 8(5.6%) stated that staffs were not involved as the minority at 4(2.8%) were unsure whether staff were involved in the formulation of the quality improvement

plans or not. With a mean of 4.06, SD= 0.948, it was clear that staff were involved in the formulation of the quality improvement plans.

More than two thirds of the respondents stated that staff were involved in the day to day decision making in the health facility with the minority at 28(19.6%) stating that staff were not involved in the day to day decision making in the health facility. The mean of 3.83, SD= 1.075 showed that that the staff were largely involved in the day-to-day decision making in the health facility.

Majority of the respondents at 125(87.4%) stated that information on quality improvement was shared with all staff in the facility, 18(12.6%) held divergent views from the majority. Given that the mean was 4.42 (SD= 2.710) ascertained that information on quality improvement was principally shared with all staff in the facility.

Majority of the respondents at 125(87.4%) stated that all employees were consulted on the quality gaps that exist in the provision of healthcare, 14(9.8%) stated that not all employee were consulted, the minority at 4(2.8%) were undecided. It was typical that all employees were consulted on the quality gaps that exist in the provision of healthcare in public health facilities in Kisumu East Sub-county, Kenya, mean =4.03, SD= 0.822.

Most of the respondents at 139(87.2%) stated that employee involvement was a critical component during the implementation of total quality management, the minority of the respondents at 4(2.8%) had a divergent opinion. At a mean of 4.03, SD= 0.822, it was characteristic that employee involvement was critical component during the implementation of total quality management.

#### 4.6.2 Correlation between Employee involvement and Service delivery in public healthcare facilities

The study conducted a correlation analysis using Spearman's Rho to test the association between employee involvement and service delivery in public health facilities. The results were as shown in Table 4.8

**Table 4.8: Correlation between Employee involvement and Service delivery in public healthcare facilities**

			Service Delivery	Employee Involvement
Spearman's rho		Correlation Coefficient	1.000	.567**
	Service Delivery	Sig. (2-tailed)	.	.000
		N	143	143
		Correlation Coefficient	.567**	1.000
	Employee Involvement	Sig. (2-tailed)	.000	.
		N	143	143

It was established that there is a significant moderate positive relationship between employee involvement and service delivery in public healthcare facilities in Kisumu East Sub-county, Kenya  $r = 0.567^{**}$ ,  $p < 0.05$ . This meant that there involving employees more in total quality management would lead to an improvement in service delivery in public healthcare facilities. A study by Coile (1990), revealed that involvement of all personnel has an influence on service delivery especially in institutions that provide healthcare.

#### 4.7 Continuous Improvement and Service Delivery in Public Health Facilities

This section analyses, interprets and presents findings on the fourth objective of the study: To investigate the influence of continuous improvement on service delivery in healthcare in public health facilities in Kisumu East Sub-county, Kenya. The respondents were given several 5-point Likert Scale questions to respond to 1-Strongly Disagree, 2-Disagree, 3-Neutral, 4-Agree and 5-Strongly Agree; the means were calculated and interpreted. The results are as shown in Table 4.9.

**Table 4.9: Views on continuous improvement and Service delivery in public health facilities.**

Statements	SA	A	N	D	SD	Mean	SD
	f(%)	f(%)	f(%)	f(%)	f(%)		
The management insists on having things done the right way all the times	32(22.4%)	85(59.4%)	18(12.6%)	8(5.6%)	0(0.00%)	3.99	0.760
There are continuous assessment done of the status of healthcare service provision	32(22.4%)	85(59.4%)	14(9.8%)	12(8.4%)	0(0.00%)	3.96	0.813
The quality recommendations from the assessment been implemented	32(22.4%)	77(53.8%)	26(18.2%)	8(5.6%)	0(0.00%)	3.93	0.793
The recommendations helped in improving quality at the facility	36(25.2%)	73(51.0%)	26(18.2%)	8(5.6%)	0(0.00%)	3.96	0.813
The facility is ever striving to improve the quality of healthcare	36(25.2%)	93(65.0%)	10(7.0%)	4(2.8%)	0(0.00%)	4.13	0.649
<b>Mean of mean</b>						<b>3.994</b>	

Majority of the respondents at 117(81.8%) stated that the management insisted on having things done the right way all the times, 18(12.6%) were unsure while the minority at 8(5.6%) stated that management did not insist on having things done the right way all the times. The mean was computed as 3.99, SD= 0.760, it was commonplace that the management insisted on having things done the right way all the times.

More than two thirds of the respondents noted that there were continuous assessments done on the status of healthcare service provision, 14(9.850) were unsure whether there are continuous assessments done on the status of healthcare service provision or not as the minority at 12(8.4%) stated that there was no continuous assessment done of the status of healthcare service provision. With a mean of 3.96, SD= 0.813, it was common that continuous assessments were done on the status of healthcare service provision.

More than two thirds of the respondents stated that the quality recommendations from the assessment had been implemented, 26(18.2%) were unsure while the least number of respondents at 8(5.6%) stated that the quality recommendations from the assessment had never been implemented. The item mean= 3.93(SD= 0.793), this was an indication that the quality recommendations from the assessment had been largely implemented.

More than two thirds of the respondents stated that the recommendations helped in improving quality at the facility, 26(18.2%) were uncertain while the least number of respondents at 8(5.6%) stated that the recommendations did not helped in improving quality at the facility. It was evident that the implementation of the quality recommendations helped in improving quality at the public health facilities, mean= 3.96 (SD= 0.813).

Majority of the respondents at 129(90.2%) stated that the facility strove to improve the quality of healthcare, 10(7.0%) of the respondents were undecided while the minority at 4(2.8%) stated that the facility did not strive to improve the quality of healthcare. Most public health facilities strove towards improving the quality of healthcare, mean = 4.13, SD= 0.649.

**4.7.2 Correlation between Employee involvement and Service delivery in public healthcare facilities**

The study conducted a correlation analysis using Spearman’s Rho to test the relationship between employee involvement and service delivery in public health facilities. The results were as shown in Table 4.10

**Table 4.10: Correlation between Employee involvement and Service delivery in public healthcare facilities**

			<b>Service</b>	<b>Continuous</b>
			<b>Delivery</b>	<b>Improvement</b>
Spearman's rho	Service Delivery	Correlation Coefficient	1.000	.860**
		Sig. (2-tailed)	.	.000
	Continuous Improvement	N	143	143
		Correlation Coefficient	.860**	1.000
		Sig. (2-tailed)	.000	.
		N	143	143

It was evident that there is a significant strong positive relationship between continuous improvement and service delivery in public health facilities  $r=0.860^{**}$ ,  $p<0.05$ . This meant that

there implementing continuous improvement to a large extent would lead to an improvement in quality of service delivery in the public health facilities in Kisumu East Sub-county, Kenya.

#### 4.8 Service Delivery in Healthcare in Public Health Facilities

This section presents and interprets findings on the dependent variable of the study: Service delivery in healthcare in public facilities. The respondents were given several 5-point Likert Scale questions to respond to 1-Strongly Disagree, 2-Disagree, 3-Neutral, 4-Agree and 5-Strongly Agree; the means were calculated and interpreted. The results are as shown in table 4.11

**Table 4.11: Views on service delivery in public facilities**

<b>Statements</b>	<b>SA</b>	<b>A</b>	<b>N</b>	<b>D</b>	<b>SD</b>	<b>Mean</b>	<b>SD</b>
	<b>f(%)</b>	<b>f(%)</b>	<b>f(%)</b>	<b>f(%)</b>	<b>f(%)</b>		
The cost of service of services at the facility is affordable to most clients	36(25.2)	75(52.4)	22(15.4)	10(7.0)	0(0.00)	3.96	0.83
The services offered at the facility are of considerably high quality	32(22.4)	75(52.4)	18(12.6)	18(12.6)	0(0.00)	3.85	0.914
The services are often rendered to clients in a timely manner; they don't que for too long	32(22.4)	69(48.3)	18(12.6)	24(16.8)	0(0.00)	3.76	0.986
Our clients are satisfied with our services and they give us positive feedback every day	36(25.2)	65(45.5)	22(15.4)	20(14.0)	0(0.00)	3.82	0.969
<b>Mean of mean</b>						<b>3.847</b>	

More than three quarters of the respondents at 111(77.6%) stated that the cost of services at the facility was affordable to most clients, 22(15.4%) were undecided while the least at 10(7.0%) stated that the cost of services at the facility was not affordable to most clients. The mean was 3.96, SD= 0.830, this affirmed that the cost of services at the facility was primarily affordable to most clients in the public health facilities.

Nearly three quarters of the respondents at 107(74.8%) stated that the services offered at the facility were of considerably high quality, at 18(12.6%) were both undecided as the same number of respondents also stated that the services offered at the facility were not of high quality. It was commonplace that the services offered at the facility were of high quality, mean =3.85, SD= 0.814.

Over two thirds of the respondents stated that the services were often rendered to clients in a timely manner; they didn't queue for too long, 24(16.8%) stated that the services were not often rendered to clients in a timely manner; they didn't queue for too long while the least number of respondents at 18(12.6%) were undecided, mean = 3.76 (SD= 0.906).

More than two thirds of the respondents stated that their clients were satisfied with their services and they gave positive feedback every day, 22(15.4%) were undecided while the minority at 20(14.0%) stated that their clients were neither satisfied with their services nor gave positive feedback every day. The mean was 3.82 (SD= 0.969), this showed that the clients were satisfied with the services and gave positive feedback every day.



#### 4.9 Regression Analysis

The study conducted a logistic regression analysis to further analyse the relationship between the independent and the dependent variable. The analysis brings all the variables into one model.

The results are as shown in Table 4.12

**Table 4.12: Regression Analysis**

	B	S.E.	Wald	df	Sig.	Exp(B)
Managerial Commitment	.957	1.405	.463	1	.006	2.603
Staff Training	.964	1.253	.592	1	.041	2.623
Employee Involvement	.062	1.243	.002	1	.020	1.064
Continuous Improvement	4.609	.764	36.404	1	.000	100.422
Constant	-3.681	.623	34.899	1	.000	.025

Public health facilities that had managerial commitment to a large extent were 2.603 times more likely to have high quality of service delivery compared to those facilities that had managerial commitment to a small extent. Public health facilities that had their staff trained to a large extent were 2.623 times more likely to have high quality of service delivery compared to those facilities that had their staff trained to a small extent.

Public health facilities that involved employees to a large extent were 1.064 times more likely to have high quality of service delivery compared to those that had employees involved to a small extent. Public health facilities that practiced continuous improvement to a large extent were 100.422 times more likely to attain high level of service delivery as compared to public health facilities that practiced continuous improvement to a small extent.

#### 4.10 Hypothesis Testing

The study used the chi-square test statistics approach to test the null hypotheses, the findings were as follows:

$H_0$  : There is no significant relationship between management commitment and service delivery in healthcare in public health facilities in Kisumu East Sub-county, Kenya.

Since the  $X^2$  critical values= 3.84 <  $X^2$  test statistics = 54.331 (df =1), the test statistic therefore falls in the rejection region. The null hypothesis was rejected because there was no significant relationship between management commitment and service delivery in healthcare in public health facilities in Kisumu East Sub-county, Kenya.

$H_0$  : There is no significant relationship between staff training and service delivery in healthcare in public health facilities in Kisumu East Sub-county, Kenya.

Since the  $X^2$  critical values= 3.84 <  $X^2$  test statistics = 49.911 (df =1), the test statistic therefore falls in the rejection region. The null hypothesis was rejected because there was no significant relationship between staff training and service delivery in healthcare in public health facilities in Kisumu East Sub-county, Kenya.

$H_0$  : There is no significant relationship between employee involvement and service delivery in healthcare in public health facilities in Kisumu East Sub-county, Kenya.

Since the  $X^2$  critical values= 3.84 <  $X^2$  test statistics =31.421 (df =1), the test statistic therefore falls in the rejection region. The null hypothesis was rejected because there was no significant

relationship between employee involvement and service delivery in healthcare in public health facilities in Kisumu East Sub-county, Kenya.

$H_0$  : There is no significant relationship between continuous improvement and service delivery healthcare in public health facilities in Kisumu East Sub-county, Kenya.

Since the  $X^2$  critical values= 3.84 <  $X^2$  test statistics =103.684 (df =1), the test statistic therefore falls in the rejection region. The null hypothesis was rejected because there was no significant relationship between continuous improvement and service delivery healthcare in public health facilities in Kisumu East Sub-county, Kenya.

## CHAPTER FIVE

### SUMMARY OF FINDINGS, DISCUSSIONS, CONCLUSIONS AND RECOMMENDATIONS

#### 5.1 Introduction

This chapter presents the summary of the main findings of the study, conclusions, recommendations arrived at and contribution to body of knowledge. It also gives suggestions for further research.

#### 5.2 Summary of findings

The first objective of the study was to examine out the influence of management commitment on service delivery in healthcare in public health facilities in Kisumu East Sub-county, Kenya. Typically, health facility in-charges were committed to enhancing quality of healthcare in the facility, mean =4.18, SD= 0.484.

It was commonplace that the boards of management were committed to enhancing quality of healthcare in the facility, mean 3.97, SD= 0.903. It was common that the health facility management team held meetings to discuss quality issues, mean of 4.03, SD= 0.822. It was usual that the organization's management highly supported organizational performance, individual development, and organizational learning, mean of 3.92, SD= 0.560. The mean of mean was =4.025, this meant that managerial commitment was high in the public health facilities in Kisumu East Sub-county, Kenya. The findings showed that there is a significant moderate positive relationship between managerial commitment and service delivery  $r=0.588^{**}$   $p<0.05$ .

The second objective of the study was to determine the influence of staff training on service delivery in healthcare in public health facilities in Kisumu East Sub-county, Kenya. It was

characteristic that training on how to enhance quality of healthcare in the facility was largely implemented, mean =4.11, SD= 0. 683. With a mean of 4.28, SD= 0.450, It was popular that training the health staff was fundamental for the successful implementation of TQM. It was representative that continuing education and technical training on quality improvement of healthcare for all levels of personnel was largely adopted, mean= 4.28, SD= 0.509. It was normal that the training got on quality healthcare had contributed greatly in enhancing the quality of healthcare at the facility, mean=4.20, SD= 0. 684. The study established that there was a significant moderate positive relationship between staff training and service delivery  $r=0.473^{**}$ . The mean of mean was = 4.217, this that staff training was done to a large extent in public health facilities in Kisumu East Sub-county, Kenya.

The third objective was to examine the influence of employee involvement on service delivery in healthcare in public health facilities in Kisumu East Sub-county, Kenya. It was typical that the staff were involved in the formulation of the quality improvement plans, mean= 4.06, SD= 0. 948. There was consensus that staff were involved in the day to day decision making in the health facility, mean=3.83, SD= 1.075. It was popular that the information on quality improvement was shared with all staff in the facility, mean= 4.42, SD= 2.710. All employees were consulted on the quality gaps that exist in the provision of healthcare mean= 4.03, SD= 0.822. It was typical that the employee involvement was a major critical component during the implementation of total quality management, mean=4.03, SD= 0. 822. The mean of mean= 4.126, this meant that employees were engaged to a large extent in total quality management initiatives in the public health facilities. It was established that there is a significant moderate positive relationship

between employee involvement and service delivery in public health facilities in Kisumu East Sub-county, Kenya  $r = .567^{**}$ ,  $p < 0.05$ .

The fourth objective of the study was to investigate the influence of continuous improvement on service delivery in healthcare in public health facilities in Kisumu East Sub-county, Kenya. The management insisted on having things done the right way all the times, mean= 3.99, SD= 0.760. It was typical that continuous assessments were done on the status of healthcare service provision, mean= 3.96, SD= 0.813. The respondents agreed that the quality recommendations from the assessment had been largely implemented, mean=3.93, SD= 0.793 and helped in improving quality at the facility, mean= 3.96, SD= 0.813. The mean of mean=3.847, this meant that continuous improvement was practiced to a large in the public health facilities in Kisumu East Sub-county, Kenya. The facilities strove to improve the quality of healthcare, mean= 4.13, SD= 0.649. It was found out that there is a significant strong positive relationship between continuous improvement and service delivery in public health facilities  $r = 0.860^{**}$ ,  $p < 0.05$ .

### **5.3 Discussions**

With a mean of 4.18 (SD= 0.484) this implied that the health facility in-charges were committed to enhancing quality of healthcare in the facility. A study by Taylor and Wright (2003) and Huq (2005) established that commitment of leadership would enhance the quality of healthcare in healthcare facilities through better quality measurement due to the support, contributions and resources ploughed in.

At a mean of 3.97 (SD= 0.903), it was commonplace that the management board was committed to enhancing quality of healthcare in the facility. This is critical; a study by Venkateswarlu and

Nilakant, (2005) revealed that support by management is critical for the successful implementation of TQM in healthcare.

All the respondents at stated that training them and other health staff in the facility was fundamental for the successful implementation. This finding is supported by a research study by (Rad, 2005), that established that training is vital in the promotion and development of an organizations skill.

It was typical that continuing education and technical training on quality improvement of healthcare for all levels of personnel was largely adopted in the public health facilities, mean= 4.28, SD= 0.509. Brashier et al. (1996) pointed out that that continued education and training of all staff is a plus in the success of TQM practices.

It was established that the training on quality healthcare had contributed greatly in enhancing the quality of healthcare at the facility, mean = 4.20 (SD= 0.684). The findings converge with the assertions by Rad (2005) that training is critical in enhancing the quality of quality healthcare at the facility. A research study carried out by Salah Mahmoud Diab (2012) also supported the findings largely by revealing that training courses for employees in the health facilities in the area of the dimensions of medical service quality makes the quality concept among employees deep and hence achieve the quality dimensions at the best level.

With a mean of 4.06, SD= 0.948, it was clear that staff were involved in the formulation of the quality improvement plans. Gibbons and Schutt (2010), Macey and Schneider (2008) noted that staffs who are engaged and obliged to their employers should be very willing to give extra effort in achieving the set goals engagement affects other major human resources objectives, for

instance retention, job performance, absenteeism and (indirectly through the employer's reputation) recruitment.

At a mean of 4.03, SD= 0.822, it was characteristic that employee involvement was critical component during the implementation of total quality management. The findings concur with a study undertaken by Huq, (2005); Schalk and Dijk (2005) noting that engagement of staff is key since results in the development of healthy corporate image through the provision of quality services to the clients.

It was established that there is a significant moderate positive relationship between employee involvement and service delivery in public healthcare facilities in Kisumu East Sub-county, Kenya  $r= 0.567^{**}$ ,  $p<0.05$ . A study by Coile (1990), revealed that involvement of all personnel has an influence on service delivery especially in institutions that provide healthcare.

It was commonplace that the management insisted on having things done the right way all the times, mean=3.99, SD= 0.760,. A study by Berwick (1989) largely supported the study findings by revealing that leaders should take the fore front in change emission in the health sector and tries to avoid blame game and taking into the account the assumption that Health care is very good today; together, we intend to make it even better."

This study established that the quality recommendations from the assessment had been largely implemented. These findings were in divergence with a study by Venkateswarlu and Nilakant, (2005), that revealed that institutions take up TQM strategies but do not engage in their implementation.



## **5.4 Conclusions**

It was inferred that there is a significant moderate positive relationship between managerial commitment and service delivery in public health facilities in Kisumu East Sub-county, Kenya. Enhancing managerial commitment to total quality management would enhance the quality of service delivery in public health facilities in Kisumu East Sub-county, Kenya.

It was concluded that there was a significant moderate positive relationship between staff training and service delivery in public health facilities in Kisumu East Sub-county, Kenya. Strengthening staff training would lead to an improvement in service delivery at the public health facilities in Kisumu East Sub-county, Kenya.

It is inferred that that there is a significant moderate positive relationship between employee involvement and service delivery in public healthcare facilities in Kisumu East Sub-county, Kenya. Involving employees more in total quality management would lead to an improvement in service delivery in public healthcare facilities.

It was concluded that that there is a significant strong positive relationship between continuous improvement and service delivery in public health facilities. Implementing continuous improvement to a large extent would lead to an improvement in quality of service delivery in the public health facilities in Kisumu East Sub-county, Kenya.

## **5.5 Recommendations**

The county government need to further enhance managerial commitment towards the implementation of total quality management practices in the facilities, this shall lead to more

improvement in the in the quality of healthcare service delivery in the public healthcare facilities in Kisumu County.

The county government needs to come up with a policy to ensure regular and systematic on-job training to all the medical personnel in Kisumu East Sub-county, Kenya, this shall lead to more improvement in the quality of healthcare.

The health facility in-charges and the management boards need to institutionalize employee engagement by coming up with a clear framework that shall create a platform for employee participation in total quality management in public health facilities in Kisumu East Sub-county, Kenya.

The County government of Kisumu needs to document and sensitize all the health facilities the continuous improvement strategy for healthcare. This shall harmonize total quality management practices for better quality of healthcare.

## 5.6 Contribution to body of Knowledge

<b>Objective</b>	<b>Contribution to the body of Knowledge</b>
To examine out the influence of management commitment on service delivery in healthcare in public health facilities in Kisumu East Sub-county, Kenya.	The findings showed that there was a significant moderate positive relationship between managerial commitment and service delivery $r=0.588^{**}$ $p<0.05$ . Public health facilities that had managerial commitment to a large extent were 2.603 times more likely to have high quality of service delivery.
To determine the influence of staff training on service delivery in healthcare in public health facilities in Kisumu East Sub-county, Kenya.	The study established that there was a significant moderate positive relationship between staff training and service delivery $r=0.473^{**}$ . The mean of mean was = 4.217, this that staff training was done to a large extent in public health facilities in Kisumu East Sub-county, Kenya. Public health facilities that had their staff trained to a large extent were 2.623 times more likely to have high quality of service delivery.
To examine the influence of employee involvement on service delivery in healthcare in public health facilities in Kisumu East Sub-county, Kenya.	It was established that there was a significant moderate positive relationship between employee involvement and service delivery in public healthcare facilities in Kisumu East Sub-county, Kenya $r= .567^{**}$ , $p<0.05$ . Public health facilities that involved employees to a large extent were 1.064 times more likely to have high quality of service delivery.
To investigate the influence of continuous improvement on service delivery in healthcare in public health facilities in Kisumu East Sub-county, Kenya	It was found out that there was a significant strong positive relationship between continuous improvement and service delivery in public health facilities $r=0.860^{**}$ , $p<0.05$ . Public health facilities that practiced continuous improvement to a large extent were 100.422 times more likely to attain high level of service delivery.

### **5.7 Suggestions for further study**

The study established that there was a significant moderate positive relationship between managerial commitment and service delivery. Nonetheless, it is not clear if the County Government had a contribution on this. The study therefore proposes an investigation into the role of the County Government in the implementation of total quality management in public health facilities in Kisumu East Sub-county, Kenya.

## REFERENCES

- Ahire, S.L., Golhar, D.Y., & Waller, M.A., (2006). "Development and validation of TQM implementation constructs", *Decision Sciences*, 27 (1), p. 23–55.
- Albejaidi, F. (2010). Healthcare System in Saudi Arabia: An Analysis of Structure, Total Quality Management and Future Challenges. *Journal of Alternative Perspectives in the Social Sciences*, 2, (2),794-818.
- Alexander, J.A. & Lee, S.Y.(2011). Does governance matter? Board configuration and performance in not-for profit health facilities. *Milbank Q.*,84, 733-758.
- Bowling, A. (1999). *Research Methods in Health; Investigating Health Services*. Buckingham:University press.
- Bradley, E.H., Curry, L.A., Webster. T.R., Mattera, J.A., Roumanis, S.A., Radford M.J.,McNamara, R.L., Barton, B.A., Berg, D.N., Krumholz, H.M.(2006). Achieving rapid door-to-balloon times: how top health facilities improve complex clinical systems. *Circulation*, 113 (8):1079 –1085.
- Chow-Chua, F.P & Goh, M.(2000)."Quality improvement in health care industry", *International Journal of Health care Management*, 43, (4), 223-229.
- Coile, R. C. (1990). *Outcome Management*. The New Medicine.Md. : Aspen publishers.
- Collins, K.S., Collins, S.K., McKinnies, R. & Jensen,N. (2008). "Employee Satisfaction and Employee Retention: Catalysts to Patient Satisfaction." *Health Care Manager* 27: 245–51.
- Dale, B.G. & Plunkett, J.J. (2000). *Managing Quality*, Hertfordshire: Philip Allan.
- Debra A.D., Laurie, E.F, Allison L.& Lori, M. (2008).The role of nurses in health facility quality improvement. *Research Brief* 3.

- Edvardsson, B. (2005). Guru's view. Service quality: beyond cognitive assessment. Passengers' Behavioral Intentions. *Journal of Travel Research*. 42, 397-40.
- Edwards P.J., et al. (2008). Maximizing your investment in EHR: Utilizing EHRs to inform continuous quality improvement. *JHIM* ,22(1):32-7.
- Eisenberg, J.M., Bowman, C.C. & Foster, N.E. (2001). Does a Healthy Health Care Workplace Produce Higher-Quality Care? *Journal of Quality Improvement*, 27,444–574.
- English, M., Nzinga, J., Mbindyo, P., Ayieko, P., Irimu, G., Mbaabu, L.(2011). Explaining the effects of a multifaceted intervention to improve inpatient care in rural Kenyan hospitals interpretation based on retrospective examination of data from participant observation, quantitative and qualitative studies. *Implement Sci*,6 (1):124.
- English,M., Lanata, C., Ngugi, I., Smith, P.C.(2006).The district health facility.In Disease Control Priorities in Developing Countries. 2nd edition. Edited by Jamison D, Alleyne G, Breman J, Claeson M, Evans D, Jha P, Mills A, Measham A. Washington DC: World Bank; 2006:1211 –1228.
- Gibbons, J. and R. Schutt. (2010) .A Global Barometer for Measuring Employee Engagement.(Research Working Group Report No. 1460-09-RR). New York: Conference Board.
- Giffith, J.R., (2000). " Championship Management for health care organization", *Journal of Health care Management*, 45, (1), pp.17-31.
- Government of Kenya (2010). *Kenya Health System Assessment 2012*.Nairobi: Government printer.
- Hansson, J. (2000). "Quality in Health care: medical or managerial". *Journal of Management in Medicine*, 14, (5), 356-361.

- Harmon, J. & Behson, S.J. (2007). Links among High-Performance Work Environment, Service Quality, and Customer Satisfaction: An Extension to the Healthcare Sector. *Journal of Healthcare Management* 52: 109–24.
- Heskett, J.L., Sasser W.E. & Wheeler, J. 2008. *The Ownership Quotient: Putting the Service Profit Chain to Work for Unbeatable Competitive Advantage*. Boston, MA: Harvard Business Press.
- Huq, Z. (2005). Managing change: A barrier to TQM implementation in service industries”, *Managing Service Quality*, 15(5), 452-469.
- Huq, Ziaul (2005), “Managing change: a barrier to TQM implementation in service industries”, *Managing Service Quality*, 15 (5), p. 452-469.
- Irving, P. & Dickson, D. (2004). “Empathy: towards a conceptual framework for health professionals”. *International Journal of Health Care Quality Assurance*, 17 (4/5), 212-220.
- Jannadi, B., Al-Shammari H, Khan A & Hussain, R 2008, ‘Current Structures and Future Challenges for the Healthcare System in Saudi Arabia’, *Asia Pacific Journal of Health Management*, vol. 3, no. 1, pp. 43-50.
- Juran, J.M. (1988). *Juran on Planning for Quality*. New York: The Free Press.
- Kabene, S., Orchard, C., Howard, J., Soriano, M., Leduc, R.(2006). The importance of human resources management in health care: a global context. *Hum Resour Health* 4 (1):20.
- Lowe, G. (2010). *Creating Healthy Organizations. How Vibrant Workplaces Inspire Employees to Achieve Sustainable Success*. Toronto, ON: Rotman/UTP Publishing.
- Ludwig von Bertalanffy (1968). *General System Theory: Foundations, Development, Applications* New York: George Braziller

- Macey, W.H. & Schneider, B. (2008). The Meaning of Employee Engagement. *Industrial and Organizational Psychology*1,3–30.
- Michie, S, West, M.A.(2004). Managing people and performance: an evidence based framework applied to health service organizations. *Int J Manage Rev*,5 (2):91 –111.
- Michie, S. & West, M.A. (2004). Managing People and Performance: An Evidence-Based Framework Applied to Health Service Organizations. *International Journal of Management Reviews*5, 91–111.
- Motwani, J., Klein, D., & Navitskas, S., (1999). Striving towards Continuous Quality Improvement: A Case Study of St. Mary’s Hospital. *Health Care Manager* 18(2), 33-40.
- Mugenda, O.M. & Mugenda A. G. (2003). Research Methods, Quantitative and qualitative Approaches. Nairobi: African Center for Technology Studies (ACTS) Press.
- Mulwa, F.W. (2006). Participatory Monitoring and Evaluation of Community Projects Zapf chancery and Polivex, Nairobi, Kenya.
- Rad, A.M.M. (2005). “A survey of total quality management in Iran Barriers to successful implementation in health care organizations”, *Leadership in Health Services*,18(3), p. 12-34.
- Rad, A.M.M. (2006). The impact of organizational culture on the successful implementation of total quality management. *The TQM Magazine*, 18(6), 606-625.
- Republic of Kenya, (2011). Kenya Demographics Profile. Nairobi: Government Printer.
- Republic of Kenya, (2001). Delivery of Health Services, Report and Recommendations. Nairobi: Government Printer.



- Rondeau, K.V. & Wagar T. (2006). Nurse and Resident Satisfaction in Magnet Long-Term Care Organizations: Do High Involvement Approaches Matter. *Journal of Nursing Management* 14,244–50.
- Saunders,M, Lewis,P & Thornhill (2007). Research methods for Business Students. Pearson Education limited, Essex England.
- Schalk, R. & Dijk, W.V., (2005). Quality management and employee commitment illustrated with examples from Dutch health care. *International Journal of Health Care Quality Assurance*,18(3), 170-178.
- Schalk, R. & Dijk, W.V., (2005).“Quality management and employee commitment illustrated with examples from Dutch health care”.*International Journal of Health Care Quality assurance*, 18(3), 170-178.
- Sikorska-Simmons, E. (2006). “Linking Resident Satisfaction to Staff Perceptions of the Work Environment in Assisted Living: A Multilevel Analysis. *The Gerontologist*46,590–98.
- Taylor, W.A. & Wright, G.H. (2003). “The impact of senior managers’ commitment on the success of TQM programs: an empirical study”, *International Journal of Manpower*, 24(5), 535-50.
- Taylor, W.A. & Wright, G.H., (2003). The impact of senior managers’ commitment on the success of TQM programs: an empirical study. *International Journal of Manpower*, 24(5),535-50.
- The Ministry of Economy and Planning (2000). The Seventh Development Plan, Ch 12, The Ministry of Economy and Planning, Saudi Arabia, viewed 3 August 2015 <http://www.mep.gov.sa/themes/Dashboard/index.jsp#1422992268750>.
- Turin,D.R. (2010). *Health Care Utilization in the Kenyan Health System: Challenges and Opportunities*. Accessed on 13/06/2013 from <http://www.studentpulse.com>.

- Van der Westhuizen (2002). Quality assurance in international, African and southern African contexts. Bloemfontein: CLF. p. 1-27.
- Venkateswarlu, P. & Nilakant, V., (2005). Adoption and Persistence of TQM Programs – Case Studies of Five New Zealand Organizations. *Total Quality Management and Business Excellence* 16(7), 807-825.
- Vouzas, F., & Psychogios, A.G. (2007). Assessing managers' awareness of TQM. *The TQM Magazine*, 19 (1), p. 62-75.
- Walsh, A., Hughes, H., & Maddox, D.P., (2002), "Total quality management continuous improvement: is the philosophy a reality?", *Journal of European Industrial Training*, Vol. 26(6), 299-307.
- Walston, S , Al-Harbi, Y. & Al-Omar, B. (2008). The Changing Face of Healthcare in Saudi Arabia. *Annals of Saudi Medicine*, 28, (4),243-250.
- Wamai, R.G. (2009). The Kenyan Health System: Analysis of the Situation and enduring challenges. *JMAJ*, 52(2), 134-140.
- West, M., Dawson, J., Admasachew,L. & Topakas,A. (2011). NHS Staff Management and Health Service Quality: Results from the NHS Staff Survey and Related Data. Birmingham, England: Aston Business School. Retrieved February 2, 2012. <[http://www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsPolicyAndGuidance/DH\\_129643](http://www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsPolicyAndGuidance/DH_129643).
- Shalliams, S.J., (1994). Patient satisfaction: A valid Concept?.*Social Science and Medicine*, 38(4),509-16.
- World Health Organization (2006). Working Together for Health. Geneva: WHO.
- Yang, C.C. (2003). "The establishment of a TQM system for the health care industry". *The TQM Magazine*,15(2), 93-98.

- Ruiz, U., and Simon, J. (2004). Quality management in health care: A 20-year journey. *International Journal of Health Care Quality Assurance*, 17: 23-33.
- Moeller, B.O., Reilly, J., Elser, J. (2000). Quality management in German health care - the EFQM excellence model. *International Journal of Health Care Quality Assurance*, 13: 254-258.
- Ramanathan, R. (2005). Operational assessment in hospitals in Sultanate of Oman. *International Journal of Operations Production Management*, 125: 39-54.
- Naveh, E., and Stern, Z. (2005). How quality improvement programme can affect general health facility performance. *International Journal of Health Care Quality Assurance*, 8: 249-271.

## **APPENDICES**

### **Appendix I: Letter of Introduction**

**C/O DEPARTMENT OF EXTRA MURAL STUDIES  
SCHOOL OF CONTINUING AND DISTANCE EDUCATION  
THE UNIVERSITY OF NAIROBI  
P.O. BOX, KISUMU**

**DATE** \_\_\_\_\_

**TO WHOM IT MAY CONCERN**

Dear Sir/Madam

### **ACADEMIC RESEARCH**

I am a student at The University of Nairobi pursuing a master of Project planning and management course. As part of the requirements I am carrying out a research to investigate the influence of Total Quality management practices on service delivery in healthcare in public health facilities in Kisumu East Sub-county, Kenya, Kisumu County. The findings from this study shall only be used for academic purposes.

Please assist by sparing 10-15 minutes to answer the questions provided in a questionnaire you shall be provided. Your Identity is not required and the information you provide shall be treated in strict confidence. If you have any questions about the survey, you can contact me on 0720 928488 or my supervisors through The University of Nairobi. They are Dr. Raphael Nyonje a Senior Lecturer Department of extra-mural studies University of Nairobi and Prof Charles Rambo the Chairman department of extra-mural studies University of Nairobi.

I remain grateful

Yours Faithfully

**GEORGE BENARD OLUOCH**

**Appendix 2: Questionnaires**

<b>SECTION A: Demographic Data</b>	
1)	<p>What is the name of health facility?</p> <p>.....</p>
2)	<p>Level of health facility?</p> <p>Level 2 [ ] Level 3 [ ] Level 4 [ ] Level 5 [ ] Level 6 [ ]</p>
3)	<p>Respondent's level of education?</p> <p>Post-secondary certificate [ ] Diploma [ ] Degree [ ] Master [ ] PhD. [ ]</p>
4)	<p>What is your designation?</p> <p>Doctor [ ] Health Facility in charge [ ] Clinical Officer [ ] Nurse [ ] Lab Technician [ ]</p> <p>Pharmacy Technician [ ] CHEW/CHW [ ]</p>
5)	<p>What is your Age</p> <p>18-27 [ ] 28-37 [ ] 38-47 [ ] 48-57 [ ] Above 57</p>
6)	<p>How long have you worked in your current position?</p> <p>.....</p>
7)	<p>How long have you worked in this facility?</p> <p>.....</p>
8)	<p>What are the strategies put in place to ensure quality health services in this facility?</p> <p>.....</p> <p>.....</p>

	<b>SECTION B: Managerial Commitment and Service Delivery.</b>
1)	<p>The health facility in-charge committed to enhancing quality of healthcare in the facility?</p> <p>Strongly disagree [ ]      Disagree [ ]      Neutral [ ]      Agree [ ]  Strongly Agree [ ]</p> <p>Explain.....</p>
2)	<p>The management board committed to enhancing quality of healthcare in the facility?</p> <p>Strongly disagree [ ]      Disagree [ ]      Neutral [ ]      Agree [ ]  Strongly Agree [ ]</p> <p>Explain.....</p>
3)	<p>The health facility management team hold meeting to discuss quality issues?</p> <p>Strongly disagree [ ]      Disagree [ ]      Neutral [ ]      Agree [ ]  Strongly Agree [ ]</p> <p>Explain.....</p>
4)	<p>If Agree or strongly agree in question above, how often are these meetings held? (Record in months)</p> <p>.....</p>
5)	<p>The organization's management supports high organizational performance, individual development, and organizational learning.</p> <p>The health facility management team hold meeting to discuss quality issues?</p> <p>Strongly disagree [ ]      Disagree [ ]      Neutral [ ]      Agree [ ]  Strongly Agree [ ]</p> <p>Explain.....</p>

6)	<p>The management has creating values, goals and systems to satisfy customer expectations and to improve an organization's performance?</p> <p>Strongly disagree [ ]      Disagree [ ]      Neutral [ ]      Agree [ ]          Strongly Agree [ ]</p> <p>Explain.....</p>
<b>SECTION C: Staff Training and Service Delivery.</b>	
1)	<p>Have you had any training on how to enhance quality of healthcare in the facility?</p> <p>Yes [ ]      No [ ]</p>
2)	<p>If yes in the question above, what aspects of healthcare were you trained on?</p> <p>Technical support [ ]    Management training [ ]    Statistical process control [ ]          Scientific problem solving approach [ ]    Information system [ ]</p>
3)	<p>Training me and other health staff in the facility is fundamental for the successful implementation of TQM?</p> <p>Strongly disagree [ ]      Disagree [ ]      Neutral [ ]      Agree [ ]          Strongly Agree [ ]</p> <p>Explain.....</p>
4)	<p>There is continuing education and technical training on quality improvement of healthcare for all levels of personnel?</p> <p>Strongly disagree [ ]      Disagree [ ]      Neutral [ ]      Agree [ ]          Strongly Agree [ ]</p> <p>Explain.....</p>
5)	<p>The training I got on quality healthcare has contributed greatly in enhancing the quality of healthcare at the facility?</p>

	Strongly disagree [ ]      Disagree [ ]      Neutral [ ]      Agree [ ] Strongly Agree [ ]
	<b>SECTION D: Employee Involvement and Service Delivery.</b>
1)	Are staff involved in the day to day decision making in the health facility?  Yes    No  Explain.....
2)	Information on quality improvement is shared with all staff in the facility?  Strongly disagree [ ]      Disagree [ ]      Neutral [ ]      Agree [ ] Strongly Agree [ ]
3)	All employee are of consulted whenever on the quality gaps that exist in the provision of healthcare?  Strongly disagree [ ]      Disagree [ ]      Neutral [ ]      Agree [ ] Strongly Agree [ ]
4)	All employee are of consulted whenever there is a quality gap that needs to be addresses?  Strongly disagree [ ]      Disagree [ ]      Neutral [ ]      Agree [ ] Strongly Agree [ ]
5)	Employee involvement is a critical component during the implementation of total quality management?  Strongly disagree [ ]      Disagree [ ]      Neutral [ ]      Agree [ ] Strongly Agree [ ]



<b>SECTION E: Continuous Improvement and Service Delivery.</b>	
1)	<p>The management insists on having things done the right way all the times?</p> <p>Strongly disagree [ ]      Disagree [ ]      Neutral [ ]      Agree [ ]  Strongly Agree [ ]</p>
2)	<p>There is continuous assessment done of the status of healthcare service provision?</p> <p>Strongly disagree [ ]      Disagree [ ]      Neutral [ ]      Agree [ ]  Strongly Agree [ ]</p> <p>Explain.....</p>
3)	<p>Agree/Strongly agree in the question above, how often are the assessments done?</p> <p>.....</p>
4)	<p>If yes in above have the quality recommendations from the assessment been implemented?</p> <p>Yes [ ]      No [ ]</p> <p>Explain.....</p>
5)	<p>If yes in question above, have the recommendations helped in improving quality at the facility?</p> <p>Yes [ ]      No [ ]</p> <p>Explain.....</p>
<b>SECTION F: Service Delivery.</b>	
1)	<p>The cost of services at the facility is affordable to most clients?</p> <p>Strongly disagree [ ]      Disagree [ ]      Neutral [ ]      Agree [ ]</p>

	<p>Strongly Agree [ ]</p> <p>Explain.....</p>
2)	<p>The services offered at the facility are of considerably high quality?</p> <p>Strongly disagree [ ]      Disagree [ ]      Neutral [ ]      Agree [ ]</p> <p>Strongly Agree [ ]</p> <p>Explain.....</p>
3)	<p>The services are often rendered to clients in a timely manner; they don't queue for too long?</p> <p>Strongly disagree [ ]      Disagree [ ]      Neutral [ ]      Agree [ ]</p> <p>Strongly Agree [ ]</p> <p>Explain.....</p>
4)	<p>Our clients are satisfied with our services and they give us positive feedback every day?</p> <p>Strongly disagree [ ]      Disagree [ ]      Neutral [ ]      Agree [ ]</p> <p>Strongly Agree [ ]</p> <p>Explain.....</p>

### Appendix 3: List of facilities visited by the researcher

1. Angola Community Dispensary
2. Orongo Dispensary
3. St Monica Hospital
4. Gita Sub County Hospital
5. Migosi Sub County Hospital
6. GK Prisons Dispensary (Kibos)
7. Simba Opepo Dispensary
8. Got Nyabondo Dispensary
9. Chiga Dispensary
10. Nyalunya Dispensary
11. St Elizabeth Chiga Health Centre
12. MTC Clinic (Kisumu)
13. Kisumu sub-county hospital

## Appendix 4: Introductory Letter from the University



**UNIVERSITY OF NAIROBI**  
COLLEGE OF EDUCATION AND EXTERNAL STUDIES  
SCHOOL OF CONTINUING AND DISTANCE EDUCATION  
KISUMU CAMPUS

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

19<sup>th</sup> July, 2016

Dear Sir/Madam,

**RE: OLUOCH GEORGE BENARD - REG NO: L50/82208/2012**

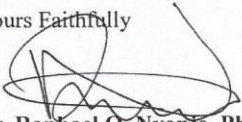
This is to inform you that **Oluoch George Benard** named above is a student in the University of Nairobi, College of Education and External Studies, School of Continuing and Distance Education, Kisumu Campus.

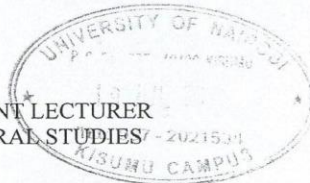
The purpose of this letter is to inform you that **Benard** has successfully completed his Masters course work and Examinations in the programme, has developed Research Proposal and submitted before the School Board of Examiners which he successfully defended and made corrections as required by the School Board of Examiners.

The research title approved by the School Board of Examiners is: *"Influence of Total Quality Management Practices on Service Delivery in Healthcare in Public Health Facilities in Kisumu East Sub-County"*. The Thesis is part of the pre-requisite of the course and therefore, we would appreciate if the student is issued with a research permit to enable him collect data and write a report. Research project reflect integration of practice and demonstrate writing skills and publishing ability. It also demonstrates the learners' readiness to advance knowledge and practice in the world of business.

We hope to receive positive response so that the student can move to the field to collect data as soon as he gets the permit.

Yours Faithfully

  
**Dr. Raphael O. Nyonje, PhD**  
SENIOR LECTURER & RESIDENT LECTURER  
DEPARTMENT OF EXTRA-MURAL STUDIES  
KISUMU CAMPUS



## Appendix 5: Ethical Approval



UNIVERSITY OF NAIROBI  
COLLEGE OF HEALTH SCIENCES  
P O BOX 19676 Code 00202  
Telegrams: varsity  
Tel: (254-020) 2726300 Ext 44355



KNH-UON ERC  
Email: [uonknh\\_erc@uonbi.ac.ke](mailto:uonknh_erc@uonbi.ac.ke)  
Website: <http://www.erc.uonbi.ac.ke>  
Facebook: <https://www.facebook.com/uonknh.erc>  
Twitter: @UONKNH\_ERC [https://twitter.com/UONKNH\\_ERC](https://twitter.com/UONKNH_ERC)



KENYATTA NATIONAL HOSPITAL  
P O BOX 20723 Code 00202  
Tel: 726300-9  
Fax: 725272  
Telegrams: MEDSUP, Nairobi

Ref: KNH-ERC/A/450

George Bernard Oluoch  
Reg. No. L50/82208/2012  
Dept. of Extra Mural Studies  
School of Continuing and Distant Education  
College of Education and External Studies  
University of Nairobi

Dear Bernard

**REVISED RESEARCH PROPOSAL- INFLUENCE OF TOTAL QUALITY MANAGEMENT PRACTICES ON SERVICE DELIVERY IN HEALTHCARE IN PUBLIC HEALTH FACILITIES IN KISUMU EAST SUB-COUNTY (P616/08/2016)**

14<sup>th</sup> November 2016  
*Approved*  
*30/11*  
**COUNTY DIRECTOR  
OF HEALTH  
KISUMU**

This is to inform you that the KNH- UoN Ethics & Research Committee (KNH- UoN ERC) has reviewed and **approved** your above revised proposal. The approval period is from 14<sup>th</sup> November 2016- 13<sup>th</sup> November 2017.

This approval is subject to compliance with the following requirements:

- Only approved documents (informed consents, study instruments, advertising materials etc) will be used.
- All changes (amendments, deviations, violations etc) are submitted for review and approval by KNH-UoN ERC before implementation.
- Death and life threatening problems and serious adverse events (SAEs) or unexpected adverse events whether related or unrelated to the study must be reported to the KNH-UoN ERC within 72 hours of notification.
- Any changes, anticipated or otherwise that may increase the risks or affect safety or welfare of study participants and others or affect the integrity of the research must be reported to KNH- UoN ERC within 72 hours.
- Submission of a request for renewal of approval at least 60 days prior to expiry of the approval period. (*Attach a comprehensive progress report to support the renewal*).
- Clearance for export of biological specimens must be obtained from KNH- UoN ERC for each batch of shipment.
- Submission of an *executive summary* report within 90 days upon completion of the study.

Protect to discover



## Appendix 6: Research Permit



### NATIONAL COMMISSION FOR SCIENCE, TECHNOLOGY AND INNOVATION

Telephone: +254-20-2213471,  
2241349, 3310571, 2219420  
Fax: +254-20-318245, 318249  
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9<sup>th</sup> Floor, Utalii House  
Uhuru Highway  
P.O. Box 30623-00100  
NAIROBI-KENYA

Ref. No. **NACOSTI/P/16/59140/13179**

Date:

**21<sup>st</sup> November, 2016**

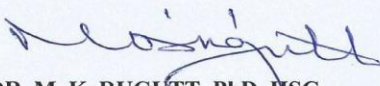
George Bernard Oluoch  
University of Nairobi  
P.O. Box 30197-00100  
**NAIROBI.**

#### **RE: RESEARCH AUTHORIZATION**

Following your application for authority to carry out research on *“Influence of total quality management practices on service delivery in healthcare in public health facilities in Kisumu East Sub-County,”* I am pleased to inform you that you have been authorized to undertake research in **Kisumu County** for the period ending **21<sup>st</sup> November, 2017.**

You are advised to report to **the County Commissioner, the County Director of Education and the County Director of Health Services, Kisumu County** before embarking on the research project.

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

  
**DR. M. K. RUGUTT, PhD, HSC.**  
**DIRECTOR-GENERAL/CEO**

Copy to:

The County Commissioner  
Kisumu County.

The County Director of Education  
Kisumu County.

*National Commission for Science, Technology and Innovation is ISO 9001:2008 Certified*