

**FACTORS INFLUENCING PROVISION OF QUALITY  
SERVICE IN THE PUBLIC HEALTH SECTOR, A CASE  
OF MWINGI SUB-COUNTY HOSPITAL, KITUI  
COUNTY-KENYA**

**KIMANZI CATHERINE MUNANYE**

**A RESEARCH PROJECT SUBMITTED IN PARTIAL  
FULFILMENT OF THE REQUIREMENT FOR THE AWARD OF  
THE DEGREE OF MASTER IN ARTS IN PROJECT PLANNING  
AND MANAGEMENT OF THE UNIVERSITY OF NAIROBI**

**2014**

## DECLARATION

This research project is my original work and has not been presented for academic award/credit in any other university.

Signature \_\_\_\_\_

Date \_\_\_\_\_

**Kimanzi Catherine Munanye**

**L50/70646/2013**

This research project has been submitted for examination with my approval as the university supervisor.

Signature \_\_\_\_\_

Date \_\_\_\_\_

**Dr. Kyalo Ndunge**

**Senior Lecturer, Associate Dean**

**College of Education and External Studies**

**University of Nairobi**

## **DEDICATION.**

This research paper is dedicated to my husband, Kimanzi Munyithya for his moral support which was a great source of inspiration during the time I was writing my research project.

## **ACKNOWLEDGEMENT.**

I hereby acknowledge the Almighty God's help during the entire period of my studies and specifically during this research writing.

This study would not have been successful without the assistance of my supervisor, Dr.Kyalo, D. N. whose enlightening suggestions made it possible for me to complete this research paper within the time limits set by the University of Nairobi for completion of Master of Arts (M.A) Degree research proposals.

I also wish to acknowledge Mr.Kang'alikya of Mwingi Sub County Hospital, all friends, colleagues and family members who assisted me in completing this research paper.

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## **ABBREVIATIONS AND ACRONYMS**

<b>CSA:</b>	<b>Central Statistical Agency</b>
<b>ELDC:</b>	<b>Equity in Less Developed Countries</b>
<b>IMNA:</b>	<b>Institute of Medicine and National Academies</b>
<b>MDGs:</b>	<b>Millennium Development Goals</b>
<b>MOSS:</b>	<b>Ministry of Health and Social Sciences</b>
<b>NGOs:</b>	<b>Non-Governmental Organization</b>
<b>OOP:</b>	<b>Out of Pocket</b>
<b>PHO:</b>	<b>Public Health Officers</b>
<b>QIP:</b>	<b>Quality Insurance Process</b>
<b>SHI:</b>	<b>Strategies for Health Insurance</b>
<b>UHI:</b>	<b>Universal Health Insurance</b>
<b>SPSS:</b>	<b>Statistical Package for Social Sciences</b>
<b>WHO:</b>	<b>World Health Organization</b>

## ABSTRACT

Quality public health service is a basic need that ensures strong and health human beings. While countries have tried to provide quality to their citizens, people in the rural areas and areas of low economic status have been faced with the challenges in accessing quality health services. The purpose of this study was to investigate the factors influencing provision of quality services in the public sector in Mwingi Sub County. The study was guided by the following specific objectives: To examine the influence of employee capacity on service delivery in public health sector, a case of Mwingi Sub County hospital, To assess the influence of financial resources on service delivery in public health sector a case of Mwingi Sub County hospital, To determine the influence of modern technology on service delivery in public health sector a case of Mwingi Sub County hospital. Maslow's Hierarchy of Human needs was used in the study. Descriptive survey design was employed in the study. The target population for the study was the hospital medical staff in Mwingi Sub County hospital. Purposive sampling was used to select 6 medical doctors and 12 public health officers based at the Sub County hospital by the virtue of being the officers in charge of providing medical and public health services and 20 nurses were selected by use of simple random sampling. A total of 38 respondents participated in the study. Data was collected through interview schedules and questionnaires. The instruments' validity was tested using supervisors opinion while split half technique was used to test on the reliability of the instruments where the instruments will be considered reliable. The Data was analyzed using Statistical Package for Social Sciences (SPSS). Descriptive statistics such as frequencies and percentages was used to analyze the data. The analyzed data is presented in the form of frequency tables. The data has been interpreted and discussed. Recommendations and suggestions for further studies have also been presented. The findings of the study revealed that employee capacity influenced provision of quality health service. Secondly financial allocation by the government was inadequate thus compromising provision of quality health services in Mwingi Sub County hospital. Lastly, findings revealed that there was inadequate and an unavailability of modern technological technique use in the sub county hospital. The study therefore recommends that; the government empower the health workforce with skills and knowledge and motivate medical staff; the government increases its financial allocation to the hospital and have proper control mechanisms of finances to avoid misappropriation and misdirection of funds; the hospital management improve and invest more on modern technology which will help in provision of quality health services.

## **CHAPTER ONE**

### **BACKGROUND OF THE STUDY**

#### **1.1 Introduction**

In a service industry, like healthcare, experience of the patient plays a crucial role in rating and assessment of quality of services. Quality in healthcare may comprise of newer technology, newer and effective medication, and higher staff to patient ratios, affordability, efficiency and effectiveness of service delivery (Terrein 2012). The health sector comprises the public system with major players including the Ministry of Health and parastatals organizations, and the private sector, which includes private for-profit, Non Governmental Organizations, and Faith Based Organizations facilities (World Health Organization, 2010).

In the United States of America for instance, in the healthcare industry, service quality has become an imperative (Dean& Lang, 2008) in providing patient satisfaction because delivering quality service directly affects the customer satisfaction, loyalty and financial profitability of service businesses. In healthcare, service quality can be broken down into two quality dimensions: technical quality and functional quality (Dean and Lang, 2008). While technical quality in the health care sector is defined primarily on the basis of the technical accuracy of the medical diagnoses and procedures or the conformance to professional specifications, functional quality refers to the manner in which the health care service is delivered to the patients.

Professional health officers play a vital role in the provision of health care globally. In most of the European countries, the performance of health care workers, including professional nurses, link closely to the productivity and quality of care provision within health care organisations. According to (Moody, 2008) in Latin America, human resources or the health workforce are the most important assets of health systems. There are many complex reasons for the deterioration of health systems in the African region; however, the main cause is the neglect of the health workforce (High-Level Forum on MDGs 2009). The human resource capacity in developing countries is insufficient to absorb and deliver health interventions offered by many new health initiatives such as the millennium development goals.

The government health service is supplemented by privately owned and operated hospitals and clinics and faith-based organizations, hospitals and clinics, which together provide between 30 and 40 percent of the hospital beds in Kenya (GoK, 2010). Depending on their comparative advantage, Non-Governmental Organizations, Faith Based Organizations and Community-Based Organizations (CBOs) undertake specific health services (Argote, 2010). Many have echoed this concern, for example, ministers of health during the 52<sup>ND</sup> session of the WHO Regional Committee for Africa (WHO 2010) and other organizations and policy- and decision-makers at the high-level forum on the millennium development goals (High-Level Forum 2009:1, World Bank 2010). It was stated that insufficient health personnel, in terms of numbers and level of performance, is one major constraint in achieving the millennium development goals (MDGs) for reducing poverty and diseases.

Some of the actions proposed to rectify this situation include improving the motivation, retention, productivity and performance of health workers, and mobilizing trained staff who are unemployed or working in other sectors to return to the health sector (High-Level Forum 2009:, Stilwell 2011). In Kenya, Health services are provided through a network of over 4,700 health facilities countrywide, with the public sector system accounting for about 51 percent of these facilities. The public health sector consists of the following levels of health facilities: national referral hospitals, provincial general hospitals, district hospitals, health centres, and dispensaries. Health services are integrated as one goes down the hierarchy of health structure from the national level to the provincial and district levels (Government of Kenya,, 2011).

Harrington, (2009) developed SERQUAL instrument with five dimensions namely; reliability, responsiveness, tangibles, assurance and empathy. However, the poor state of customer service in some public hospitals in Kenya has resulted in high turnover and weak morale among staff, making it difficult to guarantee 24-hour coverage resulting in, problems with patients care, increased cost of operations due to inefficiencies (Owino and Korir, 2007) leading some patients to look for an alternative provider and to spread negative word of mouth which affects potential clients hence growth of the hospital (Tam, 2005). This situation is further worsened by the patients or customers perception of functional issues which they perceive and interact with during the course of seeking treatment such as physical facilities, internal process; interactions with doctors, nurses and other support staff as poor and unresponsive (Valtero,2009). Dean & Lang, (2008) in their studies found a positive and significant relationship between customers perception



of service quality and their willingness to recommend the company. Whereas there has been an attempt to improve the situation, (GoK 2010), recent studies reveal that not much has been achieved in raising the quality of service in public health institutions and this is compounded by limited information on the factors that ail the delivery of service quality in the public health sector in Kenya. Local studies done on service quality had focussed on banking and public sector in general (Mwenda,2012) In Mwingi Sub County hospital, many concerned stakeholders are reporting a decline in quality of health services, and long queues of clients and patients waiting to be seen (Mutungi, 2012). The same was revealed during interviews with nurses and health centre staff in both the county and Sub County hospitals where nurses, who are supposed to be the backbone of health services, are overworked and demoralized. They show signs of burnout and complain of non recognition of their contribution to the health the public (Mwenda,2012).

In Mwingi Sub County hospital, there are a lot of patients who overwhelm the medical fraternity. Cases of mishandling of patients, delay in attendance (even accident victims) to cases of misdiagnosis are factors that need to be addressed. After consultation, patients hardly get the medicine but are advised to buy from local chemists. Patients share beds in wards and there is poor sanitation, increased time lags, coupled with delay in submission of laboratory and imaging results. This leads to compromised provision of quality health services in the facility. There was no known study that had focusing on investigating factors affecting service quality in public health sector. This study therefore sought to investigate factors affecting provision of service quality in public health sector in Mwingi.

## **1.2 Statement of the problem**

Studies show that there has been a significant disparity in Kitui County especially among the government health care providers and in poverty stricken areas where accessibility to private hospitals is not affordable (Mutungi, 2012). Just like many other parts of the country there is a growing concern about the poor quality of health services rendered to the population, even though the MOH policy endeavours to advocate for improved quality of services to be provided at health facilities in the country (MoH, 2012). According to Mutua (2011) provision of public health services in hospitals lack priority that it should enjoy in relation to staff commitment, provision of required materials and equipment's, technology and communication channels which translates to other health service delivery.

Despite the many initiatives made by NGOs, Faith Based Organizations and the government through the Ministry of Health and Sanitation, provision of quality public health services remains a challenge in the sub-county. Apparently as far as the current researcher is concerned, the available literature reviews limited studies that have been conducted in the sub county to investigate the factors influencing provision of quality health services. Previous studies by Mutui, (2006), Mayoli, (2008) and Mwenda,(2012) have investigated the influence of government initiatives to provision of health services, community involvement and provision of public health services and the future prospects on the sustainability of community health strategy respectively. Based on this knowledge, it is an appropriate time to shed light on the link between public health and provision of quality health services. Despite governments funding to Mwingi Sub County

hospital, recruitment of medical fraternity, complains are still rampant concerning the quality of service offered in the hospital. It is against this background that the current study intends to investigate the factors influencing provision of quality health services in the public health sector.

### **1.3 The purpose of the study**

The purpose of this study was to investigate the factors influencing provision of quality services in the public health sector, a case of Mwingi Sub County hospital.

### **1.4 Objectives of the study**

The study intended to achieve the following specific objectives:-

- i. To examine the influence of employee capacity on service delivery in public health sector, a case of Mwingi Sub County hospital.
- ii. To assess the influence of financial resources on service delivery in public health sector a case of Mwingi Sub County hospital.
- iii. To determine the influence of application of modern technologies on service delivery in public health sector a case of Mwingi Sub County hospital.

### **1.5 Research Questions**

The study was guided by the following research questions:-

- i. What is the influence of employee capacity on service delivery in public health sector in Mwingi Sub County Hospital?

- ii. How do financial resources influence service delivery in public health sector in Mwingi Sub County Hospital?
- iii. What is the influence of application of modern technology on service delivery in public health sector in Mwingi Sub County hospital?

### **1.6 Significance of the Study**

The findings of this study may be of practical value to persuade various stakeholders such as policy makers/planners, Ministry of Health and Sanitation professionals with new ideas on provision of quality health service to the public that should be taken into account in serving the populations since quality, efficient and effective service provision offers an opportunity to a healthy and active nation.

The findings of the study may be useful to the government health officials and the civil society by equipping them with facts and knowledge necessary to ensure effective partnership and collaboration with other stakeholders in helping health service providers to work more efficiently. The key results of this valuable investment will be seen in the lives of the beneficiaries of the public health sector and especially patients, the entire community and the nation at large after the relevant stakeholders apply the knowledge recommended in this study.

### **1.7 Limitations of the Study**

Mwingi Sub County hospital is a sub-urban setting whose cultural, climatic, economic and religious factors have influence on health service delivery especially those from

families of the low socio-economic status in the community, who are hardest hit. The results may not apply to population from other parts of the county with different climatic and economic conditions. In addition, the availability of respondents due to their busy schedules was a challenge since some may see it as a disturbance. This required the researcher to make precautions in order to overcome these limitations.

### **1.8 Delimitations of the study.**

The study was designed to investigate the factors influencing provision of quality health services in Mwingi Sub County Hospital. The study findings may be generalized for other hospitals found in similar socio-economic areas with similar climatic conditions.

### **1.9 Basic Assumptions of the Study**

This study was based on the assumption that the relevant stakeholders were aware of the importance of good health and provision of quality health service hence they were making efforts to implement this noble task. Also, it was assumed that all respondents would be cooperative and give honest and accurate responses.

### **1.10 Operational definition of significant terms.**

**Benchmarking refers to** the process of comparing one's performance with the best performance to become the "best of the best". The basis for comparison shifts from within the organization to outside the organization.

**Competency refers to** Skills, knowledge and attitude acquired through training, education and experience, and performed to specific standards under specific conditions.

**Human Resources for Health** refers to all persons working in health service delivery including: private practices and health-related institutions, plus personnel working in units that supply medical or related aids for people with disabilities, staff in the administration of a health sector, health information system, health ministry staff and the respective staff developing and producing health products.

**Human Resources Management (HRM)** refers to mobilization, motivation, development, and fulfilment of human beings in and through work and covers all matters related to the employment, use, deployment and motivation of all categories of health workers, and largely determines the productivity, and therefore the coverage, of the health services system and its capacity to retain staff.

**Outcome measurement** refers to any measurement system used to uncover or identify the health outcome of treatment of a patient, or at a systems level, for example, outcome of a set performance standard

**Performance** refers to “to carry out, accomplish or fulfil an action or task”. It also means “to work, function or to do something to a specific standard”. Performance is “an action or process of performing a task or function”.

**Performance management** refers to staff process of helping people to work more effectively by improving individual and team performance, increasing the overall productivity of an agency.

**Skill** refers to the ability to perform a task or a group of tasks which often requires the use of motor functions but also specific knowledge and skills.

**Standards of quality refer to** authoritative statements of the minimum levels of acceptable performance or results and excellence levels of results which can be based on

scientific knowledge and professional consensus. Standards of conduct and ethical standards are based on social consensus.

**Work environment refers to** characteristics of the environment in which a person is expected to work and includes physical and social environment, employment conditions and benefits.

**Workforce refers to** people who work in the various professions of health care, that is doctors, nurses, midwives, pharmacists, dentists, allied health workers, community health workers, paramedics, whose goal is to improve the health of the populations they serve.

### **1.10 Organization of the Study**

This study is organized into five chapters. The first chapter consists of the background to the study, statement of the problem, objectives of the study, research questions, and purpose of the study, significance of the study, scope/organization of the study, basic assumptions of the study, operational definition of terms and organization of the study. Chapter two is the literature review and has been organized according to the objectives of the study. A theoretical framework and conceptual framework are at the end of this chapter. Chapter three presents the methodology, that is, the research design, location of study, population and sample, sampling procedure, research instruments, pilot study, administration of research instruments and data collection procedures, internal validity and reliability, data analyses and considerations in operationalization of variables. Chapter four presents data analysis, presentation and interpretation. Chapter five consists of conclusion, recommendations and suggestions.

## **CHAPTER TWO**

### **LITERATURE REVIEW**

#### **2.1 Introduction**

This chapter covers the review of related literature. The following concepts of staff skills and provision of quality health services, financial resources and provision of quality health services, modern technology and provision of quality health services, theoretical framework and conceptual framework.

#### **2.2 Concept of Public Healthcare Service Provision**

Health is an important component of long-term socioeconomic development. It is clearly recognized that the improvement of health as a social development activity has a humane value in itself independent of other economic or political considerations (WHO, 2010). At the same time, there is definitely a relationship between improved health and economic productivity since health contributes to the formation and preservation of human capital. Health is required to maintain and improve the productivity of the work force and to make it possible for the pre-work population to take efficient advantage of the investment in educational facilities required for their later performance in life (Blas, & Limbambala, 2011).

Studies carried out in Latin America by Cohen and Levinthal (2008) on Absorptive capacity: a new perspective on learning and innovation revealed that in order to bring about measurable improvement in health it will require substantial internal investments in addition to the amounts already being expended for health. Additional investments will



also be needed from the developed countries for application to strategic opportunities. Any effort on the part of an external institution to contribute to the improvement of health conditions in the region must take into consideration the wide differences among countries with respect to health indicators, internal organization for meeting health problems, the level of health planning and the disparities in the allocation of health facilities between urban and rural areas.

According to Choi, Kim, and Lee (2008) working on Service Quality Dimensions and Patient Satisfaction Relationships in South Korea, a careful search must be undertaken to identify the priority opportunities which will maximize the contribution of external agencies to the improved planning and increased efficiency in the use of existing financial and human resources as well as expand rationally overall investments allocated to the field of health.

### **2.3 Influence of Employee Capacity on Provision of Services in the Public Health**

#### **Sector.**

Kenya suffers from professional exodus popularly known as brain drain. According to nursing workforce, 1278 nurses left the country between 2008 and 2012 for greener pastures abroad. Between 2008 and 2012, 826 nurses left public sector to join the private sector. To facilitate service quality and growth, hospitals must implement effective human resource strategies involving selective hiring, and retention of physicians and nurses (Cohen and Levinthal, 2001); monitoring of doctors on staff (or with privileges) and ensuring that they must continue to meet certain performance and practice standards to retain credentials (Crewson, 2004).

There is need for selective hiring of qualified staff. Successful recruitment and retention of staff is tied to empowerment of staff that must be treated as full partners in the hospital operation and given opportunities for advancement (Brown and Duguid, 2003). The hospitals need to place great emphasis on recruiting and retaining top-level physicians and nurses, accompanied by an effort to encourage these professionals to form working teams, including case managers, pharmacists, social workers, and others, to promote quality.

Highly skilled physicians, nurses, administrators and ancillary staff are critical to producing high-quality outcomes and effective quality improvement hence hospital growth (Argote, 2000). To improve efficiency in service delivery, public sector hospitals must build the capacity to attract and employ an adequate number of high-quality nurses (Argote and Ingram, 2000) suggests that the key to service delivery is to adapt to circumstances that are constantly changing and that the long-term winners are the best adapters, but are not necessarily the winners of today's race for market share. Hospitals quality of service often fails because of the sum total of seemingly inconsequential events arising from employees lack of capacity as in itself service delivery requires specific skill levels and experience which must be continuously learned (Cohen and Levinthal, 2008).

According to Kenya Workforce Report (2012), 9177 nurses started training between 2003-2007. Of these, 2 out of 10 started Certificate programs while 7 out of 10 took Diploma courses. Only 1% pursued a Degree programme. In terms of numbers, Kenya has 109 health workers per 100,000 people. This is a stark contrast to international standards of 235 nurses per 100,000 persons (KWR, 2012). There is therefore the need

for not only the number of nurses but also the quality of their service delivery hence the need for professional development. According to Rotich (2014), there was need for nurses to be more qualified to match the needs of the sector. Of all Kenyan nurses 39% are Certificate holders. The Nursing Council of Kenya is seeking to have Diploma as minimum level of education.

## **2.4 Influence of Financial Resources Allocation on Provision of Quality Health Services**

Financial management, in service organizations, has been a constraint and an obstacle to other functions that contribute to service delivery (Mills, 2012). He suggests an “enlightened” approach to finance in service organizations. This consists of more participative and positive approach where far from being an obstacle, it contributes to strategic planning, costing systems, personnel motivation, quality control, continued solvency, and keeping outsiders’ confidence in management (Allen, 2011). In particular, there is a need to distinguish “good costs” that improves organizational capabilities and quality service delivery from “bad costs” that increase bureaucracy hence becoming obstacles to service delivery (Kimani, and Ngindu, 2012).

Providing households with financial protection and access to needed health care is a growing priority for low- and middle-income countries, and is at the core of efforts to move towards universal coverage. To this end, many African countries are seeking to expand health insurance coverage, introduce more effective user fee exemption mechanisms for those who cannot afford care, and/or improve tax collection and increase general tax allocations to health care (Davis, Collins and Audet, 2007). The governments

of Ghana and Tanzania, for example, have introduced different forms of health insurance over the past 10 years and South Africa is currently designing a universal National Health Insurance (NHI) system to be funded largely from tax revenue. However, these three countries still face challenges in achieving equitable health care access and adequate financial risk protection, especially for vulnerable groups (Mill,2012).

Recent analyses conducted by the Strategies for Health Insurance for Equity in Less Developed Countries (SHIELD) project, which highlight inequities in the distribution of health care financing burden (who pays what) and health care benefits (who benefits from service use and by how much) among socio-economic groups in Ghana, Tanzania and South Africa. Health care financing is progressive (regressive) if, on average, the richer segments of the population are paying more (less) as a proportion of their income for health care than the poorer segments. Health financing systems in the three countries are progressive, driven largely by direct taxes, especially personal income tax, and, in South Africa, by private voluntary health insurance (WHO, 2010). However, in all three countries, out-of-pocket (OOP) payments for health care are regressive, as is voluntary health insurance for the informal sectors in Ghana and Tanzania. Although there are variations in the distribution by level of care and type of provider in the three countries, as in many other countries, the distribution of total health benefits is pro-rich (rather than pro-poor), meaning that poorer groups receive a lesser share of benefits from using health services (measured in monetary terms) than richer segments, and benefits are not distributed according to need for care (Akazil 2012; Ataguba and McIntyre 2012).

Kenya recognizes that good health is a pre-requisite to social economic development. In recent years public sector allocations for financing have significantly increased. However, provision of public health service has not improved. Global Corruption Report (2006) cites Kenya's healthcare system as lacking accountability mechanisms resulting to abuse and misappropriation.

Most funding policies have negatively affected health care provision by the state; the cost-sharing (user fees) programme introduced in 1989 being one of the most contentious. This is an indication that health financing in Kenya has faced numerous challenges, including inadequate funding (Deolitte, 2011). Limited funding by the government means out-of-pocket spending remains a key source of funds for healthcare and ultimately this negatively affects acquisition of health care by the populace. Likewise, high poverty levels among the population have also impacted negatively on health financing. With 46% of Kenyans live on less than a dollar per day (Deolitte, 2011), there has been a reciprocal relationship between poverty and health status. On one hand, poverty is a major driver of poor health status while at the same time poor health status drives the poor deeper into poverty. This implies that the poor in Kenya faces major financial barriers to accessing healthcare.

Healthcare is a national priority worldwide and one of the sectors that should receive major budget allocation. In The Abuja Declaration 2000, all African heads of states committed to allocate at least 15% of the government funding to improve health services (The Abuja Declaration 2000). This was consistent with the MDGs to be achieved in

2015 that include 3 goals related to health, and 2 goals that have health components. However, the 3 goals namely reduce child mortality, improve maternal health and combat HIV/AIDS and malaria continues to be a challenge in terms of adequate funding. That Kenya allocates an estimate 6-8% of its budget to healthcare means that healthcare has yet to receive the priority ranking as envisaged in Abuja while achievement of universal health remains a pipe dream. According to WHO “Abuja Declaration 10 Years On” (2011), Kenya is ranked among the 27 countries that have made insufficient progress in achieving Abuja Declaration objectives. In spite of the inadequate allocation to the sector, majority of Kenyans rely on government facilities to access healthcare with only 19% having health insurance. According to NHIF (2010), only 18% of the population is covered by NHIF in Kenya compared to 56% in Ghana and 70% in Rwanda. A large proportion of health financing continues to be out of pocket. This sometimes leads to patients seeking alternative healthcare like herbalists and traditional medicine men services.

## **2.5 Influence of Application of Modern Technology on Provision of Quality**

### **Services**

Technology for harnessing of Information and data play a critical role in the quality service delivery in hospitals (Allen, 2011). Investments in Technology that facilitate service assessment and improvement process is essential (Dutton and Starbuck, 2002). The hospital must show four main commitments: a willingness to invest in Information Technology; investments in Information Technology and in Quality Insurance departments with qualified staff that abstract medical records, analyze data, and facilitate

the Quality Insurance process Durton & Sturback, (2012). According to Government of Kenya report (2011) , successful Technology strategy that needs to be employed by hospitals and this must involve four main commitments: a willingness to invest in Information Technology, Working with physicians and others to customize an information system to meet specific needs and culture of the institution; nurturing and encouraging buy-in so new systems will be utilized and their benefits will be realized and devising information technology systems that provide real-time feedback to providers as they are caring for patients (GOK, 2011).

The main ingredients of a real-time system involve its timeliness. Hospitals want to develop a system that allows all caregivers to have access to relevant information as soon as it is available (Mbata, 2011), To that end, the hospitals have or are adopting applications that do the following: Reduce time lags in getting laboratory and imaging results. Whether an information system is completely home-grown or purchased off the shelf, Information Technology must be customized to incorporate and meet the particular needs and circumstances of the hospital (Sun and Shibo, 2005). This is not a one-time process, but one that must engage clinicians and administrators to adapt and refine systems over time (Karimi, 2011).

A proprietary information systems that shapes the culture, patient mix, and staffing of the hospital and engaging physicians and nurses in developing or adapting Information Technology serves to ensure that the resulting system meets the needs of clinicians (Dean & Lang 2011) It also encourages buy-in, and helps create Information Technology

champions among the staff, who then teach and encourage their colleagues to use the new system. The newer Information Technology systems reflect the hospitals commitment and willingness to invest in the tools that promote quality.

Davis recommends the kinds of quality-related Information Technology investments that the hospitals need to make include: Moving to a paperless system that provides information at the right time (electronic medical records, e-hospital notes with input at bedside); Moving toward bar-coded medications and automatic dispensing; Coordinating patient admissions with bed capacity, immediate tracking of filled beds and daily changes in nursing needs (Mutungi, 2011). Hospitals need to develop a system that allows all caregivers to have access to relevant information as soon as it is available. To that end, the hospitals have or are adopting applications that do the following: reduce time lags in getting laboratory and imaging results; deliver information on test results, history, health status while providers are treating patients so that treatment decisions can be made based on the latest information; and making user-friendly guidelines and recommendations readily accessible to physicians, based on the latest medical research on specific conditions, procedures and medications. Hospitals place a lot of emphasis in getting the right information at the right time resulting into demonstrable improvement. The quality and timing of information should be tailored to the needs of decision makers. Information should not include historic data, but also include projections for the future (Allen, 2011).



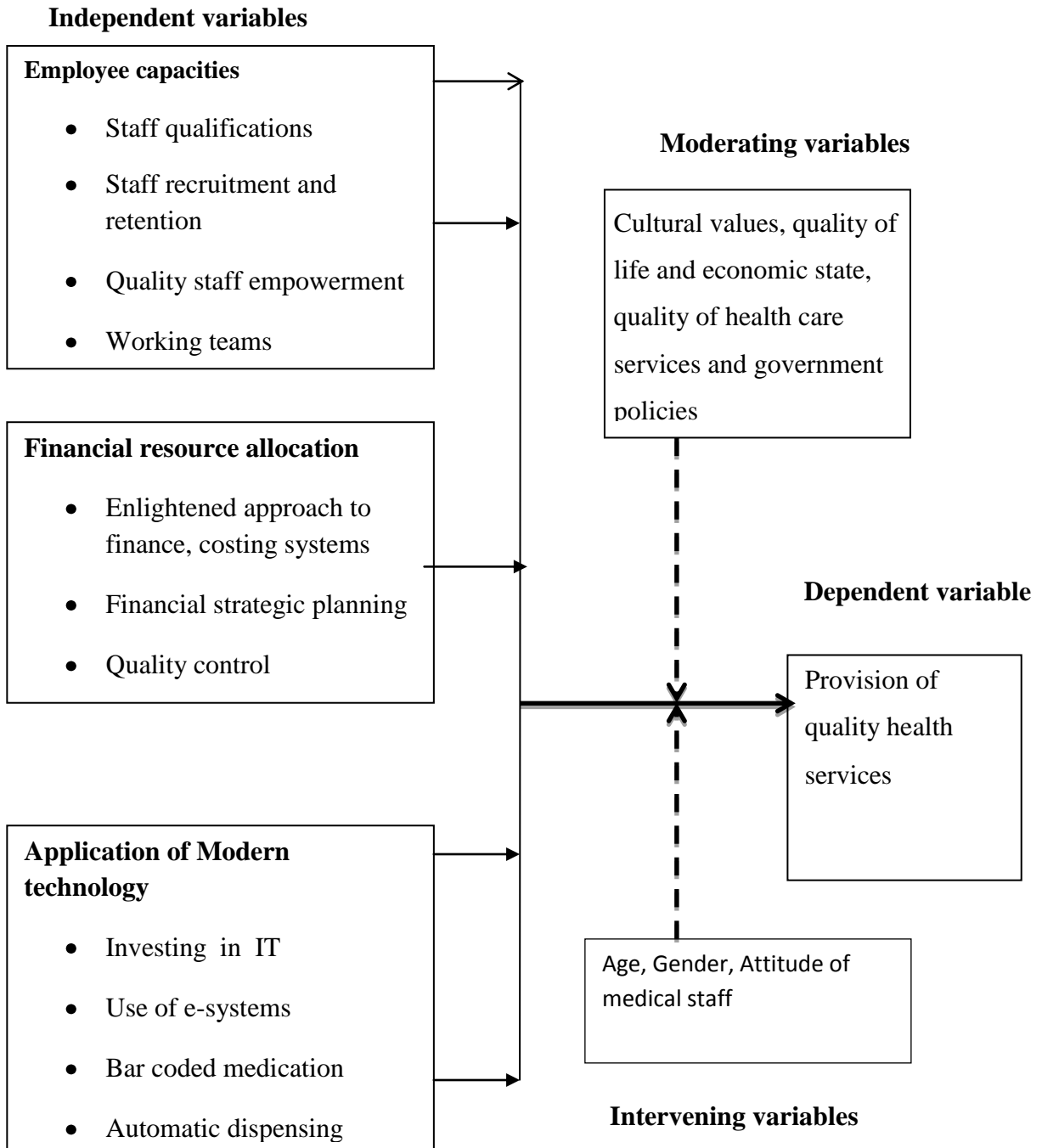
## **2.6 Theoretical framework**

Abraham Maslow (1971) developed the Theory of Hierarchy of Human needs, which is a classification of needs from the basic ones to higher order of needs. When lower needs are met, people move to higher needs. The first level is the physiological needs which include food, clothing, shelter and water. The second level is safety needs which include safety, protection, security, education and investment. Level three involves love and belonging needs. People desire to belong to a family or an institution. The fourth level is concerned with esteem needs. After people have been accepted and belong to a group of people, then they are able to develop a sense of self-worth. The fifth level is self-actualization which is the ultimate goal or purpose of human behaviour. At this level, people want to realize their full potential and continuous self-development so as to die when their energy is in creative ability.

In relation to this study, if the public do not have quality health services provided to them then they will lack the preventive and curative measures that are vital for their health. Hence get stressed because their basic needs are not well met. As a result then their health condition deteriorates making them weak and ineffective. They therefore, need to be adequately provided with quality health services hence be able to value themselves and take care of health needs and those of their fellow people consequently ensure their health growth and development.

## **2.7 Conceptual framework**

The relationship between the independent and dependent variables is shown in form of a diagram. The influence of hospital employee capacities, allocation of financial resources and the role of modern technology and extraneous variables such as age, gender, health conditions, cultural values, environmental factors and economic state of the public on provision of quality health services among the public is illustrated. This study was guided by the following conceptual framework.



## 2.8 Summary of Literature Review and Research Gap

Although much has been written about the individual variables access to public health care and the interrelationships among them, a survey of literature, however, reveal that

very little empirical studies on this subject exist, especially regarding Kenyan situation where public health service provision is faced with a lot of challenges especially in arid and semi-arid regions and among the rural poor. Previous investigations into the health service delivery have provided insights into the range of influences on its access by various groups of people. However, few studies have been carried out focusing factors influencing provision of health services among the urban cities and in big hospitals. The current researcher addresses similar issues from rural and semi-urban public's perspective and the provision of quality health services. It is anticipated that further insight into factors influencing provision of public health services will be revealed by this study. There is no similar study known to the current researcher that was carried out in the area where the current study was conducted.

## **CHAPTER THREE**

### **METHODOLOGY**

#### **3.1 Introduction**

The methodology section of the research proposal describes the procedures that were followed in conducting the study. The steps involved in conducting the study are described in details. In doing so, the following are going are discussed; research design, variables, location of the study, population sampling techniques and sample size, instruments for data collection, pilot study as well as techniques for data analysis.

#### **3.2 Research Design**

The study employed a descriptive survey design aimed at analysing the factors influencing provision of quality services in the public sector in Mwingi Sub County. Mugenda and Mugenda (2008) define descriptive survey as an approach in research that describes the characteristics or behaviour of a particular population in a systematic and accurate fashion. Both qualitative and quantitative approaches were used. The descriptive survey design attempted to collect data from the target population in order to determine the current status of the population in relation to topic of study. This is a self report study whereby information collected from the sample was used to draw logical conclusions on the interrelationship between phenomena.

Khan and Kahn (2005) postulated that survey is the most appropriate design in the behavioural sciences as it seeks to find out factors associated with occurrences of certain events and conditions of behaviour. It enables the researcher to collect in-depth

information including sensitive and personalized experiences concerning the issue being investigated. The descriptive survey design allows the researcher to study variables, as they exist. The researcher was not able to manipulate such variables as staff skills, financial resources, and modern technology and communication channels. Gay (2002) concurs that descriptive research is good enough as it involves a process of collecting data in order to test hypotheses or answer questions concerning the status of the subject in the study. It attempts to describe such things as possible behaviour, attitudes, values and characteristics.

### **3.3. Target population**

According to Mugenda and Mugenda (1999), target population is a complete set of individual cases object with some common characteristics to which researchers want to generalize the results of the study. The population that is actually surveyed is the study population. The study was carried out with a target population of 60 medical staff.

### **3.4 Sampling size and Sampling Procedure**

Simple random sampling technique and purposive sampling techniques were used. Purposive sampling techniques was used to select 6 medical doctors and 12 public health officers based on the virtue of being in charge of medical services in the hospital. It is a sampling method in which elements are chosen based on the purpose of the study. According to Parton (1990), it is the most popular in qualitative research and subjects are selected because of some characteristics. Simple random sampling was used to select the

nurses. A simple random sampling technique gives each member of the population an equal chance of being chosen.

### **3.5 Data Collection Instruments**

The researcher used an interview schedules and questionnaires to obtain data from the respondents. The researcher administered the interview schedule for doctors. The questionnaires for the public health officers and the nurses were given to the respondents and were allowed a period of two weeks to respond to the questions after which the researcher collected the questionnaires back. Mugenda and Mugenda (2003), observe that the use of a questionnaire was a popular method for data collection in most disciplines because of the relative ease and cost effectiveness with which they are constructed and administered to large samples.

#### **3.5.1 Interview guide for medical doctors**

The interview schedule was administered to medical doctors. This allowed the interviewer to follow up the respondents' answers to obtain more information and clarify vague statements. Kothari (2004) contends that interview schedule is the best because it allows room for clarification and following up of unclear answers. The researcher, hence, used this method to seek classification to some responses pertaining to the factors influencing the provision of quality services in the public health sector. The researcher administered the interview herself to the medical doctors. Prior to that, an effort was made to visit the hospital to familiarize with the relevant respondents and explain purpose of the interview.

### **3.5.2 Questionnaires for public health officers and nurses**

Two sets of questionnaires were developed for the public health officers and nurses. The questionnaires had both open ended and closed questions; the questionnaires consisted of a set of answers that closely represented their views to choose from. In the closed ended questions, the likert type of scale was used in rating, which helped in the reduction of subjectivity and also made it possible to quantitatively analyze the data. The open-ended questions allowed the respondents to communicate their views without being forced to get within the pre-conceived answers. Orodho (2004) contends that the questionnaire is a suitable method, indeed, the easiest and the cheapest way of data collection. It has both the ability to collect a large amount of information in a reasonable quick span of time. Kothari (2004) observes that a questionnaire is free from bias of the respondents who are not easily approachable can also be reached conveniently.

### **3.6 Validity of research instruments**

Kothari (2004), states that validity indicates the degree to which an instrument measures what it is supposed to measure, that is, the extent to which differences found with measuring instruments reflect true differences among those who are tested. This tests the construct validity of the instruments which is the measure of the degree to which data obtained from an instrument meaningfully and accurately reflects or represents a theoretical concept. Two different instruments that measure the same concept were used. Content validity of instruments was determined by colleagues and experts in research who looked at the measuring technique and coverage of the specific areas. The experts advised the researcher on the items to be corrected. The corrections on the identified



questions were incorporated in the instruments hence fine tuning the items to increase validity. Validity was ascertained by checking whether the questions were measuring what they were suppose to measure such as clarity of wording, whether respondents were interpreting questions in similar ways according to Odhoro (2005).A pilot study was done which ensured that the items consistently measured the variables in the study and produced reliable results. The piloting was important because it identified vague questions, unclear instructions and insufficient spaces for writing responses, clustered questions and wrong phrasing of questions which were detected and refined in good time.

### **3.7 Reliability of research instruments**

According to Kothari (2004) reliability is the consistency of instruments in producing reliable results. The pilot study was done to ensure that the items consistently measured the variables in the study and produced reliable results on repeated trials. The split half technique of assessing reliability was used. The research instruments were designed in such a way that they had two parts. Subject scores from one part were correlated with scores from the second part. Orodho (2004) contents that this method is good enough because it eliminates error due to differing test conditions. It focuses on the degree to which empirical indicators are consistent across two or more attempts to measure the theoretical concept. Mugenda and Mugenda (2008), contend that the piloting procedure helps to ascertain that the instruments of data collection are free from any pitfalls and mistakes that would have surfaced in the main data collection process if the piloting of the instruments had not been done.

To ascertain that the research instruments were reliable after the test retest were done; the researcher subjected the instruments to analysis. The researcher refined the instruments developed before embarking on the actual data collection. Any unclear instructions and information was detected during the test retest and was corrected in good time.

### **3.8 Data Collection procedure**

The researcher obtained a permit from the National Council for Science and Technology and Innovation and another one from the University of Nairobi, to allow her to carry out the research in the targeted institution. Ethical issues and considerations were put in place by the researcher to ensure that all respondents participated with informed consent. The researcher paid a pre-visit to the Sub County Hospital to familiarise herself with the medical staff in order to make the respondents free and open to issues. The questionnaires for the public health officers and nurses were given to the respondents and allowed a period of three weeks to respond to the questions after which the researcher collected the questionnaires.

### **3.9 Data Analysis procedure**

This process involved summarizing the collected data and putting it together so that the researcher could meaningfully organize, categorize and synthesise information from the data collecting tools. In the data analysis, the researcher examined each piece of information in each instrument for completeness, organized data as per research questions, coded the data and developed code sheet. For qualitative data, patterns or themes were indentified and for all the research questions data was analysed

descriptively. The Statistical Package for Social Science (SPSS) version eighteen was used to process the data.

### **3.10 Variable Operationalization**

The variables of the study are described in terms of the type of variable, their various indicators, measurement and measurement scale and data analysis procedure.

**Table 3.2: Operationalization of the variables**

<b>Objective</b>	<b>Variables</b>	<b>Type of variable</b>	<b>Indicators</b>	<b>Measurement</b>	<b>Measurement scale</b>	<b>Data analysis procedure</b>
1.To examine influence of employees capacities on provision of quality service in the public sector	Staff qualifications College grades In-service training Duty performance Adherence to ethical codes	Independent	Quality of services offered Handling of patients and hospital equipment Time taken to serve patients	Number of clients attended per day Technical effectiveness Period of time taken to deliver specified services	Ordinal	Descriptive statistics
2.To determine the influence of financial resource mobilization on provision of quality service in the public sector	Amount allocated to the hospital per year Number of hospital resources and equipments Number in-service training	Independent	Value placed strategic budgeting Need for up to date equipments Value placed on staff training	Service delivery and technical skills Demand for health services Quality and efficiency of health services	Ordinal	Descriptive statistics
3.To examine influence of modern information technology on provision of quality service in the public sector		Independent	Value placed use of computerised services Effective diagnosis methods Easy access to patients history	Quality and efficiency of equipments used More staff using modern technologies in service provision	Ordinal	Descriptive statistics

## **CHAPTER FOUR**

### **DATA ANALYSIS, PRESENTATION, INTERPRETATION AND DISCUSSION**

#### **4.1 Introduction**

In this chapter, the researcher presents the research findings that were revealed after data analysis, interpretation and presentation. The chapter is organized according to the research questions of the study. To determine the questionnaire return rate, there were 38 questionnaires distributed to 38 medical staff of Mwingi Sub County Hospital. All the 38 questionnaires were filled in and handed in to the researcher for analysis. Therefore a 100% questionnaire return rate was ensured. In the first section descriptive statistics has been used to provide background information of the responders who participated in the study. The second section presents analysis of the responses to the specific objectives of the study as provided by the respondents in the questionnaire. The purpose of the study was to investigate factors influencing provision of quality health services in the public sector, a case of Mwingi Sub County Hospital. The study sought to achieve the following specific objectives:-

- i. To examine the influence of employee capacity on service delivery in public health sector, a case of Mwingi Sub county Hospital.
- ii. To assess the influence of financial resources on service delivery in public health sector, a case of Mwingi Sub county Hospital.
- iii. To establish the influence of (ICT), information communication & technology, application of modern technology on service delivery in public health sector, a case of Mwingi Sub county Hospital.

#### 4.2 General information about the respondents.

The respondents were asked to state their gender, age bracket and highest level of education.

**Table 4.1 Distribution of medical staff by designation**

<b>Designation</b>	<b>F</b>	<b>%</b>
<b>Medical doctor</b>	6	15.79%
<b>Public health officer</b>	12	31.58%
<b>Nurses</b>	20	52.63%
<b>Total</b>	<b>38</b>	<b>100%</b>

Data obtained on the number of medical staff indicates that 15.79% of medical staff are medical doctors, 31.58 % are public health officers whereas 52.63 % are nurses.

**Table 4.2 Distribution of medical doctors by gender**

<b>Gender</b>	<b>F</b>	<b>%</b>
<b>Male</b>	5	83.33%
<b>Female</b>	1	16.67%
<b>Total</b>	<b>6</b>	<b>100%</b>

Results from the table indicate that 83.33% of the medical doctors are male while 16.67% are female

**Table 4.3 Distribution of public health officers by gender**

<b>Gender</b>	<b>F</b>	<b>%</b>
<b>Male</b>	9	75%
<b>Female</b>	3	25%
<b>Total</b>	<b>12</b>	<b>100%</b>

It is evident from the table that a significant 75% of all public health officers in Mwingi Sub county Hospital are male whereas 25% are female.

**Table 4.4 Distribution of nurses by gender**

<b>Gender</b>	<b>F</b>	<b>%</b>
<b>Male</b>	5	25%
<b>Female</b>	15	75%
<b>Total</b>	<b>20</b>	<b>100%</b>

As revealed in the table 4.4, 25% of the nurses are male as opposed to 75% who are female.

The findings from the tables above (table 4.2, 4.3, 4.4) indicate that there are more male medical doctors and public health officers than female ones in Mwingi Sub County Hospital. These findings may have an influence on provision of quality public health services. This is due to the fact that about 1/3 of Mwingi residents are Muslims who do not allow their women to be attended to by male doctors. However, findings reveal that there are more female nurses than male nurses.

The age brackets of the respondents are illustrated below.

**Table 4.5 Age distribution of medical doctors**

<b>Age bracket</b>	<b>F</b>	<b>%</b>
<b>26-30</b>	2	33.33%
<b>31-35</b>		
<b>36-40</b>	1	16.67%
<b>41-45</b>	2	33.33%
<b>46-50</b>		
<b>51-55</b>	1	16.67%
<b>56-60</b>		
<b>Above 60</b>		
<b>Total</b>	<b>6</b>	<b>100%</b>

It's indicated in the table 33.33% of the medical doctors age lie between 26-30 years, 16.66% are between 36-40years, 33.33% are between 41-45 years whereas another 16.66% is between 51-55 years of age.

**Table 4.6 Age distribution of public health officers**

<b>Age brackets</b>	<b>F</b>	<b>%</b>
<b>26-30</b>	1	8.33%
<b>31-35</b>	3	25%
<b>36-40</b>		
<b>41-45</b>	2	16.66%
<b>46-50</b>	1	8.33%
<b>51-55</b>	5	41.66%
<b>56-60</b>		
<b>Above 60</b>		
<b>Total</b>	<b>12</b>	<b>100%</b>



Results from the table indicate that 8.33% of public health officers' age lies between 26-30 years, 25% lie between 31-35 years, 16.66% between 41-45 years, 8.33% between 46-50 and a majority 41.66% lie between 51-55 years.

**Table 4.7 Age distribution of nurses.**

<b>Age bracket</b>	<b>F</b>	<b>%</b>
<b>26-30</b>	2	10%
<b>31-35</b>	10	50%
<b>36-40</b>	3	15%
<b>41-45</b>	3	15%
<b>46-50</b>	2	10%
<b>51-55</b>		
<b>50-60</b>		
<b>Above 60</b>		
<b>Total</b>	<b>20</b>	<b>100%</b>

Results from the table indicate that a majority of the nurses 10% are aged between 26-30 years at Mwingi Sub county Hospital, 50% lie between 31-35 years, 15% are aged between 36-40 years, another 15% are aged between 41-45 years and 10% are aged between 46-50 years.

According to Tables 4.4, 4.5, 4.6, majority of the respondents' ages lie between 31-55 years. This is an indication that majority of the respondents were adequately exposed to issues of quality public health service, an impression created from their ages that they were mature enough to comprehend the issues of quality public health service.

**Table 4.8 Frequency and percentage distribution of highest level of education of medical doctors**

<b>Qualifications</b>	<b>Frequency</b>	<b>Percentage</b>
<b>Certificate public health</b>		
<b>Diploma in public health</b>		
<b>Bachelor in public health</b>	6	100%
<b>Masters in public health</b>		
<b>Any other(specify)</b>		
<b>Total</b>	<b>6</b>	<b>100%</b>

As indicated above 100% of the medical doctors have a Bachelors degree in public health.

**Table 4.9 Frequency and percentage distribution of highest level of education of Public Health Officers**

<b>Qualifications</b>	<b>F</b>	<b>%</b>
<b>Certificate in public health</b>	2	16.67%
<b>Diploma in public health</b>	6	50%
<b>Bachelors in public health</b>	4	33.33%
<b>Masters in public health</b>		
<b>Any other(specify)</b>		
<b>Total</b>	<b>12</b>	<b>100%</b>

As shown in the table 16.67% of the public health officers are certificate holders in public health, 50% are diploma holders in public health whereas 33.33% are Bachelors Degree holders in public health.

**Table 4.10 Frequency and percentage distribution of nurses' highest level of education**

<b>Qualifications</b>	<b>F</b>	<b>%</b>
<b>Certificate in public health</b>	2	20%
<b>Diploma in public health</b>	18	80%
<b>Bachelors in public health</b>		
<b>Masters in public health</b>		
<b>Any other(specify)</b>		
<b>Total</b>	<b>20</b>	<b>100%</b>

As shown in the table, 20% of the nurses hold certificates in public health whereas 80% are diploma holders in public health.

Education is important for the acquisition of necessary skills and competencies for proper work (Bardhan et.al 2006). From Table 4.8 all the medical doctors are first degree holders. This is a clear indication that they were more knowledgeable compared to the nurses and the PHOs who are not degree holders. Being more knowledgeable implies that they were more qualified to reliably answer the questions about factors influencing provision of quality service in the health sector.

According to Table 4.9 and 4.10 most public health officers and nurses are diploma holders who should go for further studies and training. Service delivery requires specific skill levels and experience which must be continually learnt (Cohen and Levinthal, 2008). The respondents were also required to indicate their years of service in current stations.

**Table 4.11.Frequency and percentage distribution of years of service of medical doctors in current station**

<b>Years in station</b>	<b>F</b>	<b>%</b>
<b>1-5</b>	2	33.33%
<b>6-10</b>	3	50.00%
<b>11-15</b>		
<b>16-20</b>	1	16.66%
<b>21-25</b>		
<b>26-30</b>		
<b>Over 30</b>		
<b>Total</b>	<b>6</b>	<b>100%</b>

As indicated on the table above 33.33% of medical doctors at Mwingi Sub County Hospital have served in this station for between 1-5 years. A further 50% have 6-10years of service in the current station while 16.66% have served in the station for 16-20 years.

**Table 4.12 Public health officers' frequency and percentage distribution of years in service in current station**

<b>Years</b>	<b>F</b>	<b>%</b>
<b>1-5</b>	1	8.33%
<b>6-10</b>		
<b>11-15</b>	4	30%
<b>16-20</b>		
<b>21-25</b>		
<b>26-30</b>	6	50%
<b>Over 30</b>	1	8.33%
<b>Total</b>	<b>12</b>	<b>100%</b>

As indicated above the public health officers have 1-5 years' service in the current station. 30% have 11-15 years of service, 50 % have 26-30 years of service, and 8.33% have over 30 years of service in current station.

**Table 4.13 Frequency and percentage distribution of years of service of nurses in current station**

<b>Years</b>	<b>F</b>	<b>%</b>
<b>Below 1 year</b>		
<b>1-5</b>	2	10%
<b>6-10</b>	5	25%
<b>11-15</b>	10	50%
<b>16-20</b>	2	10%
<b>21-25</b>	1	5%
<b>26-30</b>		
<b>Over 30</b>		
<b>Total</b>	<b>20</b>	<b>100%</b>

As indicated in the table above, 10 % of the nurses have served in current station for between 1-5 years, 25% for 6-10 years, 50% for between 11-15 years, 10% for 16-20 years and another 5% for 21-25.

As shown on Tables 4.11, 4.12, 4.13, majority of the respondents had served in their current station for quite a long time hence were fairly experienced. Experience is significant because the credibility of information gathered in any study is informed by the

many years of the respondents' service in the company (Chandler 2004). The experience proves the reliability and validity of the information obtained. Their skills, knowledge and expertise have been tested for a long period hence their perception on the matter under study had been influenced by their service in the current station.

#### **4.3 Influence of employee capacity on service delivery in public health sector**

The study sought to establish the professional qualification of medical staff and the years of service in current station. The study first sought to establish the professional qualifications of the respondents as presented in tables 4.14

**Table 4 .14 Medical staff response on whether they have the required professional skills.**

	<b>Yes</b>		<b>No</b>	
	F	%	F	%
<b>Medical doctors</b>	6	15.79%		
<b>P.H.O's</b>	12	31.58%		
<b>Nurses</b>	20	52.63%		
<b>Total</b>	<b>38</b>	<b>100%</b>		

All medical staff (100%) stated that they have the required professional skills.

The study further sought to establish how public health professional skills enhance provision of quality services.

**Table 4.15 Medical doctors' response on whether professional skills enhance provision of quality health services.**

	SA		A		U		D		SD	
	F	%	F	%	F	%	F	%	F	%
<b>Proper handling and use of equipment</b>	2	33.33%	4	66.67%						
<b>Establish good rapport with patients</b>	1	16.67%	3	50%	2	33.33%				
<b>Use of knowledge for right diagnosis</b>	6	100%								

Evidence from the table show that 33.33% of the medical doctors strongly agreed that professional skills enable them to properly handle and use equipment's while 66.67% agreed on the same.16.67% strongly greed that professional skills assist them to establish good rapport with patients, 50% agreed and 33.33% were undecided.100% of the respondents strongly agreed that professional skills enabled them to use knowledge for right diagnosis.

**Table 4.16 Public health officers’ responses on whether professional skills enhance provision of quality health services.**

	SA		A		U		D		SD	
	F	%	F	%	F	%	F	%	F	%
<b>Proper handling and use of equipment</b>	1	8.33%	7	58.33%	2	16.67%	2	16.67%		
<b>Establish good rapport with patients</b>	4	33.33%	7	58.33%	1	8.33%				
<b>Use of knowledge for right diagnosis</b>	12	100%								

Results from the table show that 8.33 % of the public health officers strongly agreed that professional skills enable them to handle and use medical equipment appropriately, 58.33% agree on the same, 16.67% are undecided while 16.67% disagreed. 33.33% strongly agreed that professional skills assist them to establish good rapport with patients, 58.33% agreed on the same while 8.33% were undecided. 100% of the public health officers strongly agreed that the professional skills



**Table 4.17 Nurses' responses on whether professional skills enhance provision of quality health services.**

	SA		A		U		D		SD	
	F	%	F	%	F	%	F	%	F	%
<b>Proper handling and use of equipment</b>	7	35%	9	45%	2	10%	2	10%		
<b>Establish good rapport with patients</b>	3	15%	15	75%	1	5%	1	5%		
<b>Use of knowledge for right diagnosis</b>	12	60%	8	40%						

As shown in the table 35% of the nurses strongly agree that professional skilled staffs enable them to handle and use medical equipment appropriately, 45% agree on the same whereas 10% were undecided and 10% disagree. On whether professional skills enable them to establish good rapport with patients, 15% of the nurses strongly agree, 75% agree, 5% were undecided and another 5% disagreed. Asked whether professional skills assist them to use knowledge for right diagnosis, 60% of the nurses strongly agreed they do and 40% agreed on the same.

**Table 4.18 Medical staff responses on whether patients access health services easily**

	Yes		No	
	F	%	F	%
<b>Medical doctors</b>	1	16.67%	5	83.33%
<b>P.H.O</b>	3	25%	9	75%
<b>Nurses</b>	3	15	17	85%

Results from the table show that 16.67% of medical doctors stated that patients access health services easily whereas 83.33% stated that patients don't access health services easily. 25% of public health officers stated that patients access health services easily while 75% the majority indicated they did not. 15% of nurses stated that patients access healthcare services easily while 85% stated the opposite.

The researcher wanted to know the challenges people faced in accessing health services in the area.

**Table 4.19 Medical doctor's responses on the challenges patients face that hinder them from accessing quality health services.**

	SA		A		U	D		SD	
	F	%	F	%		F	%	F	%
<b>Cost of medical services</b>	5	83.33%	1	16.67%					
<b>Poor infrastructure</b>	3	50%	3	50%					
<b>Population increase</b>	1	16.67%	5	83.33%					

It is evident from the results above that 83.33% of medical doctors strongly agree that the cost of medical services is a hindrance to accessibility of quality health services while

16.66% agree on the same. 50% of the doctors strongly agreed that poor infrastructure especially roads hinder accessibility of healthcare services, 50% also agreed to the same. 16.66% strongly agreed while 83.33% agreed to population increase being a hindrance to healthcare service accessibility. Population increase leads to depletion of commodities especially drugs and congestion in the wards hence hindering accessibility to healthcare services.

**Table 4.20 Public health officers' responses on the challenges patients face that hinder them from accessing quality health services.**

	SA		A		U		D		SD	
	F	%	F	%	F	%	F	%	F	%
<b>Cost of medical services</b>	1	8.33%	10	83.33%	1	8.33%				
<b>Poor infrastructure</b>	3	25%	8	66.67%	1	8.33%				
<b>Population increase</b>	3	25%	9	75%						

As indicated above 8.33% of the public health officers strongly agree that the cost of medical services is a hindrance to health service accessibility and 83.33% agree on the same while 8.33% were undecided. 25% of the public health officers strongly agreed that infrastructure hinders accessibility to quality healthcare services whereas 66.67% agreed that infrastructure hinder accessibility, and a further 8.33% were undecided. 25% of the public health officers strongly agreed while 75% strongly agreed to high population contributing to inaccessibility to health care services.

**Table 4.21 Nurses' responses on the challenges patients face that hinder them from accessing quality health services.**

	SA		A		U		D		SD	
	F	%	F	%	F	%	F	%	F	%
<b>Cost of medical services</b>	3	15%	16	80%					1	5%
<b>Poor infrastructure</b>	2	10%	16	80%	2	10%				
<b>Population increase</b>	9	45%	10	50%	1	5%				

From the table above, it is evident that 15% of the nurses strongly agreed to the cost of medical services being high thus hindrance of quality public health service accessibility, the majority of 80% agreed to the same while 5% strongly disagreed. 10% of the nurses strongly agreed, 80% agreed whereas 2% were undecided on poor infrastructure especially roads being a hindrance to accessing quality health services by patients. 45% of the nurses strongly agreed that population increase which leads to depletion of commodities especially drugs and congestion in the wards hinders accessibility to healthcare services while 50% agree and 5% were undecided.

**Table 4.22 Medical staff responses on whether the hospital staffs provide quality services to patients.**

	Yes		No	
	F	%	F	%
<b>Medical doctors</b>	5	83.33%	1	16.67%
<b>P.H.O</b>	9	75%	3	25%
<b>Nurses</b>	16	80%	4	20%

Results from the table above show that 83.33% of the medical doctors agreed that the hospital staffs provide quality services to patients while 16.67% did not. 75% of the public health officers agreed that the hospital staffs provide quality services to patients while 25% did not agree on this. 80% of the nurses agreed that the hospital staffs provide quality services to patients while 20% did not.

#### **4.4 Influence of financial resources on service delivery in public health sector.**

The study sought to know whether the government allocates adequate funds for smooth running of the hospital.

**Table 4.23 Medical staff response on whether the government allocates adequate funds for smooth running of the hospital**

	Yes		No	
	F	%	F	%
<b>Medical doctors</b>			6	15.79%
<b>P.H.O's</b>			12	31.58%
<b>Nurses</b>			20	52.63%
<b>Total</b>			<b>38</b>	<b>100%</b>

According to this data, all medical staff (100%) stated that the government does not allocate adequate funds for smooth running of the hospital. This is a clear indication that

the hospital is in dire need of funding to rehabilitate, redesign, and equip it to ensure effective service delivery to the public (GoK 2001). Low funding for this facility can adversely affect the delivery of quality health services. Most policies have negatively affected health care provision by the state; the cost-sharing (user fees) programme introduced in 1989 being one of the most contentious. This is an indication that health financing in Kenya has faced numerous challenges, including inadequate funding (Deolitte, 2011). Limited funding by the government means out-of-pocket spending remains a key source of funds for healthcare and ultimately this negatively affects acquisition of health care by the populace. Likewise, high poverty levels among the population have also impacted negatively on health financing. With 46% of Kenyans live on less than a dollar per day (Deolitte, 2011), there has been a reciprocal relationship between poverty and health status. On the one hand, poverty is a major driver of poor health status while at the same time poor health status drives the poor deeper into poverty. This implies that the poor in Kenya faces major financial barriers to accessing healthcare.

**Table 4.24 Other sources of funding**

<b>Sources</b>	<b>%</b>
<b>Banks</b>	17%
<b>NGOs</b>	33%
<b>Community Based Organization</b>	19%
<b>Faith Based Organization</b>	25%
<b>Individual donations</b>	10%
<b>Others</b>	
<b>Total</b>	<b>100%</b>

Banks give 17%, NGOs give 33%, Community Based Organizations 19%, Faith based organizations 25% and individual donations cater for 10% of other sources of funding.

Despite these fundings, and given that quality service is not provided in the facility, is a clear indication that there is need to source for more funders and well wishers.

**Table 4.25 Whether there are control mechanisms employed to ensure equitable distribution of funds across departments.**

	Yes		No	
	F	%	F	%
<b>Medical doctors</b>	6	15.79 %		
<b>P.H.O's</b>	12	31.58%		
<b>Nurses</b>	20	52.63%		
<b>Total</b>	<b>38</b>	<b>100%</b>		

All 100% medical staff agreed that there are control mechanisms employed to ensure equitable distribution of funds across departments. The control mechanisms include Heads of Departments presenting prioritized requests to the Hospital Management Committee; the Committee then allocates funds to the departments referring to the hospital's strategic plan.

Involving all Heads of Departments' inputs in budgeting the financial resources goes a long way in ensuring equitable distribution of funds across departments. Fixed budgets in hospitals may lead to inequities and fails to respond to new demands and priorities while prioritised budget systems leads to technical inefficiency by preventing health staff from optimizing the deployment of inputs perpetuating poor quality service (Wanjau, 2012).

The study sought to establish whether the mechanisms the hospital management puts across ensure enlightened approach to financial management. The control mechanisms are auditing updates, proper procurement services and supervision by a private body.

**Table 4.26 Medical doctors’ responses on whether control mechanisms ensure enlightened approach to financial management in the hospital**

	SA		A		U		D		SD	
	F	%	F	%	F	%	F	%	F	%
<b>Auditing updates</b>			4	66.67%	1	16.67%	1	16.67%		
<b>Proper procurement services</b>	6	100%								
<b>Supervision by a private body</b>			5	83.33%	1	16.67%				

As shown in the table above 66.66% of the medical doctors agreed that auditing updates ensured enlightened approach to financial management, 16.66% were undecided and another 16.66% disagreed. All respondents strongly agreed that proper procurement services ensure enlightened approach to financial management. 83.33% of the doctors agreed that supervisory services by a private body ensured enlightened approach to financial management. 16.67% were undecided.



**Table 4.27 Public Health Officers’ responses on whether control mechanisms ensure enlightened approach to financial management in the hospital**

	SA		A		U		D		SD	
	F	%	F	%	F	%	F	%	F	%
<b>Auditing updates</b>	1	8.33%	10	83.33%			1	8.33%		
<b>Proper procurement services</b>	2	16.66%	8	66.66%	2	16.66%				
<b>Supervision by a private body</b>	1	8.33%	8	66.67%	3	25%				

As indicated above 83.33% of the public health officers agreed that that auditing updates ensured enlightened approach to financial management, 8.33% strongly agreed while another 8.33% disagreed. 16.66 % strongly agreed that proper procurement services ensures enlightened approach to financial management,66.66% agreed and another 16.66% were undecided. 66.67% of the respondents agreed that supervisory services by a private body ensured enlightened approach to financial management. 8.33% strongly agreed while 25% were undecided.

**Table 4.28 Nurses’ responses on whether control mechanisms ensure enlightened approach to financial management in the hospital**

	SA		A		U		D		SD	
	F	%	F	%	F	%	F	%	F	%
<b>Auditing updates</b>			16	80%	1	5%	3	15%		
<b>Proper procurement services</b>	5	25%	10	50%	5	25%				
<b>Supervision by a private body</b>	5	25%	13	65%	2	10%				

Results from the table above 80% of the nurses agreed that auditing updates ensured enlightened approach to financial management, 15% disagreed while 5% were undecided. 25% of the nurses strongly agreed that proper procurement services ensures enlightened approach to financial management, 50% agreed while 25% were undecided. 25% of the nurses strongly agreed that supervisory services by a private body ensured enlightened approach to financial management, 65% agreed and 10% were undecided.

According to Tables 4.26, 4.27, 4.28, majority of the respondents agreed that auditing updates ensured enlightened approach to financial management. Auditing updates keeps outsiders confident in management (Arhin-tenkorang, 2000). Majority also agreed that proper procurement services ensured enlightened approach to financial management in the hospital. Proper procurement helps to distinguish between ‘good’ costs that improve organizational capabilities and quality service delivery from ‘bad’ costs that increase bureaucracy hence becoming obstacles to service delivery (Kimani and Ngindu, 2012).

Furthermore accountability can be achieved thru using a private body using monitoring, auditing and accounting mechanisms defined by the country’s legal and institutional framework which is a pre-requisite to ensure that allocated funds are used for the intended purposes.

**Table 4.29 Medical staff responses on whether financial allocation influences the quality of services provided in the hospital.**

	Yes		No	
	F	%	F	%
Medical doctors	6	15.79%		
P.H.O’s	12	31.58%		
Nurses	20	52.63%		
<b>Total</b>	<b>38</b>	<b>100%</b>		

All medical staff 100% agreed that financial allocation influences the quality of services provided in the hospital.

The medical staff stated that financial allocation influences the quality of service provided in the hospital through purchasing of high quality drugs and medical equipments, staff motivation, allow appropriate facilities to be put in place at the right times, electricity power back up and consistent supply of drugs. This is in agreement with (Wanjau, 2012.)

**4.5 Influence of application of modern technology in provision of quality public health services.**

The study sought to find out if the hospital had or used modern technology in their practice. The technologies addressed include e-systems, bar coded medication and

automatic dispensing technique and the study also sought to establish whether the hospital employs available modern technology technique in its health practices.

**Table 4.30 Medical staff response on whether the hospital employs available modern technology technique in its health practices.**

	Yes		No	
	F	%	F	%
<b>Medical doctors</b>	5	83.33%	1	16.67%
<b>P.H.O's</b>	10	83.33%	2	16.67%
<b>Nurses</b>	17	85%	3	15%

As shown above 83.33% of the medical doctors agreed that they employed available modern technique in their health practices 16.67% did not. 83.33% of the public health officers agreed that they employed available modern technique in their health practices while 16.67% did not. 85% of the nurses agreed that they employed available modern technique in their health practices and 15% did not.

Information from Table 4.30 shows disparity in the responses given. The fact that the hospital uses simple computers may have influenced respondents to respond in the affirmative. However, a small percentage of respondents disagreed on this as they understood what modern technological techniques entail in provision of quality public service. The modern technological investments include amongst others paperless system, (E-medical notes, E-hospital notes) moving toward bar coded medication and automatic dispensing (Allen, 2001).

**Table 4.31 Medical doctors’ response on the modern technology techniques they use in their health practices.**

	Yes		No	
	F	%	F	%
<b>E-systems (computer, internet)</b>	2	33.33%	4	66.67%
<b>Bar coded medication</b>			6	100%
<b>Automatic dispensing</b>			6	100%

Results from the table indicate 33.33% of the medical doctors stated that they use E-systems in their health practices while 66.67 do not use them. 100% of the medical doctors stated that they do not use bar coded medication and automatic dispensing in their health services.

**Table 4.32 Public health officers’ response on the modern technology techniques they use in their health practices**

	Yes		No	
	F	%	F	%
<b>E-systems(computer,internet)</b>	3	25%	9	75%
<b>Bar coded medication</b>			12	100%
<b>Automatic dispensing</b>			12	100%

Results from the table indicate that 25% of the public health officers stated that they use E-systems in their health practices while 75% do not. 100% of public health officers stated that they neither use bar coded medication nor automatic dispensing in their health services.

**Table 4.33 Nurses' response on the modern technology techniques they use in their health practices**

	Yes		No	
	F	%	F	%
<b>E-systems(computer,internet)</b>	4	20%	16	80%
<b>Bar coded medication</b>			20	100%
<b>Automatic dispensing</b>			20	100%

It is evident from the table that 20% of the nurses stated that they use E-systems in their health practices while 80% do not. 100% of the nurses stated that they neither use bar coded medication nor automatic dispensing in their health services.

The use of modern technology serves to ensure that the resulting system meets the needs of the clinician (Blas and Limbambala, 2001). This modern technology is a far cry for this facility.

**Table 4.34 Medical staff responses on whether the hospital management has invested in modern technology adequately.**

	Yes		No	
	F	%	F	%
<b>Medical doctors</b>			6	15.79%
<b>P.H.O's</b>			12	31.58%
<b>Nurses</b>			20	52.63%
<b>Total</b>			<b>38</b>	<b>100%</b>

According to the table, 100% of the medical staff stated that the management has not invested in modern technology adequately.

This is a clear indication that a lot needs to be done in this area. Investing in modern technology that facilitates services assessment and improvement process is essential

(Dutton and Starbuck, 2002). Some new information technology like moving to paperless systems that provide information at the right time (electronic medical records, e-hospital notes with inputs at bedside are important.

**Table 4.35 Medical staff responses on whether the use of available modern technology among staff improves service delivery to the public.**

	Yes		No	
	F	%	F	%
<b>Medical doctors</b>	6	15.79%		
<b>P.H.O's</b>	12	31.58%		
<b>Nurses</b>	20	52.63%		
<b>Total</b>	<b>38</b>	<b>100%</b>		

All (100%) of the medical staff agreed that use of the available modern technology among staff improves service delivery to the public.

The analyzed data shows that all (100%) respondents agreed that use of available modern technology among staff improves service delivery to the public. Moving to paperless system that provides information at the right time reduces time lags in getting laboratory and imaging results, deliver information on test results based on the latest information and making user friendly recommendations readily accessible to guidelines and physicians based on the latest medical research on specific conditions, procedures and medication (Geneva, 2010).

## **CHAPTER FIVE**

### **SUMMARY OF FINDINGS, CONCLUSION AND RECOMMENDATION**

#### **5.1 Introduction.**

This chapter comprises of summary of findings, conclusion, recommendations and suggestions and is organized into the following sub headings: summary of the study, discussion of the study findings, recommendations of the study and suggestions for further studies.

#### **5.2 Summary of the study**

The purpose of the study was to investigate factors influencing health services in the public health sector a case of Mwingi Sub County Hospital. The study was guided by the following objectives: to examine the influence of employee capacity on service delivery in the public sector a case of Mwingi Sub County hospital, to access the influence of financial resources on service delivery a case of Mwingi Sub County hospital, to establish the influence of application of modern technology on service delivery.

Descriptive survey design was used in conducting this study. The target population was 60 in the facility. A sample size of 38 of the population with 6 medical doctors, 12 Public Health Officers and 20 nurses were selected using purposive technique and simple random sampling was used to select 20 nurses at least 2 from each department to participate in the study.



Three sets of questionnaires were used to collect data from 3 categories of medical staff. Data was analysed using descriptive statistics such as percentages using frequency distribution tables.

### **5.3 Conclusion.**

Based on the findings, the study concluded that employee capacity influenced provision of quality health services. It was established that almost all nurses were diploma holders and none were bachelor holders. There is need for this sector to be addressed. Professional development is vital if quality health services are to be provided.

The study also concluded that financial allocation influenced provision of quality health services. Mwingi Sub County Hospital does not receive adequate funding from the government. This compromises service delivery in that there is inconsistent supply of drugs, inadequate operational space, lack of important services like referral, homecare services as well as motivation of staff. The establishment of e-systems can only be made possible if enough finances are to be allocated to the facility.

The study also concluded that modern technology techniques are lacking in the facility. This conclusion was reached after identifying that there were no e-system services in the hospital, bar coded medication, automatic dispensing techniques and reduction of time lags. These are some of the modern techniques that lead to effective and quality service delivery since they are fast, and ensure accurate laboratory results.

#### **5.4 Recommendations.**

The following recommendations were made on the findings of the study:

- i) There is need to empower the health workforce with skills and knowledge and also motivate the medical staff. They should also be taken to seminars and workshops for further training.
- ii) There should be consistent supply of drugs and enough operational space.
- iii) There is need to allocate adequate financial resources to cater for services and have proper control mechanisms of finances to avoid misdirection of funds.
- iv) There is need to improve on IT equipment, invest more on modern technology which will help reduce time lags as well as improve control of commodities like drugs.

#### **5.5 Suggestions for further study.**

To fill the gaps that were outside the scope and mandate of the study in the area of provision of quality public health service, the following areas were identified and suggested for further research;

- i) The influence of leadership and policy formulation on provision of quality health services.
- ii) Since the study was conducted in one hospital, there is need to carry out a similar research in other hospitals so as to compare the findings.

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## APPENDICES.

### **Appendix 1: Transmittal Letter**

The respondents,

Medical Staff,

Mwingi Sub County Hospital,

Mwingi.

Dear respondents,

I am a postgraduate student at the University of Nairobi carrying out a research project on the factors influencing provision of quality health services in the public health sector a case of Mwingi Sub County Hospital. I am humbly requesting you to kindly respond to the questions asked as sincerely as possible. The ultimate goal of the study is to provide insight into factors that influence provision of quality health services. I assure you that the information you will give will be treated with utmost confidence and will only be used for the purpose of this study. To assist in concealing your identity, I request you not to write your name or anything that can lead to the revelation of your identity.

I will be grateful for your co-operation.

Thank you in advance,

Yours faithfully,

Sign \_\_\_\_\_

Kimanzi Catherine Munanye

University of Nairobi

**Appendix II: Questionnaire for Medical Doctors.**

**SECTION A: Demographic information**

1. a) Please indicate your gender

Male ( )

Female ( )

b) Age bracket

26 – 30 years ( )

31 – 35 years ( )

36 – 40 years ( )

41 – 45 years ( )

46 – 50 years ( )

51-55 years ( )

55-60 years ( )

Above 60 ( )

c) How long have you served as a medical doctor in your current position?

i) Less than one year ( )

ii) 1-5 years ( )

iii) 6-10 years ( )

iv) 11-15 years ( )

v) 16-20 years ( )

vi) 21-25 years ( )

vii) 26-30 years ( )

viii) Over 30 years ( )

2. What are your professional qualifications?

Diploma Medicine ( )

Bachelors Medicine ( )

Masters Medicine ( )

Any other (specify) \_\_\_\_\_

**SECTION B: Employee Capacities and Provision of Quality Health Services**

3a) Do you have the required professional skills?

Yes ( ) No ( )

b) Does your professional skill enhance provision of quality services?

Yes ( ) No ( )

4. a) Do patients access quality health services easily?

Yes ( ) No ( )

b) What challenges does the public face in accessing the quality services?

.....

**SECTION C: Allocation of Financial Resources and Provision of quality Health services**

5. a) Does the government allocate adequate funds for smooth running of the hospital?

Yes ( ) No ( )

b) If yes, how much does it allocate per year?

.....

c) What other sources of funding do you have?

- i. Banks ( )
- ii. NGOs ( )
- iii. Community Based Organisation ( )
- iv. Faith Based Organisation ( )
- v. Individual donations ( )
- vi. Others ( )

6. a) Are there control mechanisms employed to ensure equitable distribution of funds across department?

Yes ( ) No ( )

b) If yes, what control mechanisms are put in place to ensure equitable distribution of funds across departments?

.....

c) What control mechanisms are put in place to ensure enlightened approach to financial management?



7. According to you, does financial allocation influence the quality of services provided in the hospital?

Yes ( ) No ( )

**SECTION D: Application of modern technology in Provision of Quality Health Services**

8. a) Does the hospital employ modern technology techniques in its health practices?

Yes ( ) No ( )

b) What modern technology techniques do you use?

i. E-Systems (computers, internet) Yes ( ) No ( )

ii. Bar coded medication Yes( ) No ( )

iii. Automatic dispensing Yes( ) No ( )

9. Does the application of modern technology among hospital staff improve service delivery to the public?

Yes ( ) No ( )

### Appendix III: Questionnaire for Public Health Officers

#### SECTION A: Demographic information

1. a) Please indicate your gender

Male ( )

Female ( )

b) Age bracket

26 – 30 years ( )

31 – 35 years ( )

36 – 40 years ( )

41 – 45 years ( )

46 – 50 years ( )

51-55 years ( )

55-60 years ( )

Above 60 ( )

c) How long have you served as a Public Health Officer in your current position?

i) Less than one year ( )

ii) 1-5 years ( )

iii) 6-10 years ( )

iv) 11-15 years ( )

v) 16-20 years ( )

vi) 21-25 years ( )

vii) 26-30 years ( )

viii) Over 30 years ( )

2. What are your professional qualifications?

Diploma Medicine ( )

Bachelors Medicine ( )

Masters Medicine ( )

Any other (specify) \_\_\_\_\_

**SECTION B: Employee Capacities and Provision of Quality Health Services**

3a) Do you have the required professional skills?

Yes ( ) No ( )

c) Does your professional skill enhance provision of quality services?

Yes ( ) No ( )

4. a) Do patients access quality health services easily?

Yes ( ) No ( )

b) What challenges does the public face in accessing the quality services?

.....

**SECTION C: Allocation of Financial Resources and Provision of quality Health services**

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5. a) Does the government allocate adequate funds for smooth running of the hospital?

Yes ( ) No ( )

b) If yes, how much does it allocate per year?

.....

c) What other sources of funding do you have?

- vii. Banks ( )
- viii. NGOs ( )
- ix. Community Based Organisation ( )
- x. Faith Based Organisation ( )
- xi. Individual donations ( )
- xii. Others ( )

6. a) Are there control mechanisms employed to ensure equitable distribution of funds across department?

Yes ( ) No ( )

b) If yes, what control mechanisms are put in place to ensure equitable distribution of funds across departments?

.....

c) What control mechanisms are put in place to ensure enlightened approach to financial management?

7. According to you, does financial allocation influence the quality of services provided in the hospital?

Yes ( ) No ( )

**SECTION D: Application of modern technology in Provision of Quality Health Services**

8. a) Does the hospital employ modern technology techniques in its health practices?

Yes ( ) No ( )

b) What modern technology techniques do you use?

i. E-Systems (computers, internet) Yes ( ) No ( )

ii. Bar coded medication Yes( ) No ( )

iii. Automatic dispensing Yes( ) No ( )

9. Does the application of modern technology among hospital staff improve service delivery to the public?

Yes ( ) No ( )

**Appendix IV: Questionnaire for nurses.**

**SECTION A: Demographic information**

1. a) Please indicate your gender

Male ( )

Female ( )

b) Age bracket

26 – 30 years ( )

31 – 35 years ( )

36 – 40 years ( )

41 – 45 years ( )

46 – 50 years ( )

51-55 years ( )

55-60 years ( )

Above 60 ( )

c) How long have you served as a nurse in your current position?

i) Less than one year ( )

ii) 1-5 years ( )

iii) 6-10 years ( )

iv) 11-15 years ( )

v) 16-20 years ( )

vi) 21-25 years ( )

vii) 26-30 years ( )

viii) Over 30 years ( )

2. What are your professional qualifications?

Diploma Medicine ( )

Bachelors Medicine ( )

Masters Medicine ( )

Any other (specify) \_\_\_\_\_

**SECTION B: Employee Capacities and Provision of Quality Health Services**

3. a) Do you have the required professional skills?

Yes ( ) No ( )

c) Does your professional skill enhance provision of quality services?

Yes ( ) No ( )

4. a) Do patients access quality health services easily?

Yes ( ) No ( )

b) What challenges does the public face in accessing the quality services?

.....

**SECTION C: Allocation of Financial Resources and Provision of quality Health services**

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5. a) Does the government allocate adequate funds for smooth running of the hospital?

Yes ( ) No ( )

b) If yes, how much does it allocate per year?

.....

.....

c) What other sources of funding do you have?

xiii. Banks ( )

xiv. NGOs ( )

xv. Community Based Organisation ( )

xvi. Faith Based Organisation ( )

xvii. Individual donations ( )

xviii. Others ( )

6. a) Are there control mechanisms employed to ensure equitable distribution of funds across department?

Yes ( ) No ( )

b) If yes, what control mechanisms are put in place to ensure equitable distribution of funds across departments?

.....

c) What control mechanisms are put in place to ensure enlightened approach to financial management?

7. According to you, does financial allocation influence the quality of services provided in the hospital?

Yes ( ) No ( )

**SECTION D: Application of modern technology in Provision of Quality Health Services**

8. a) Does the hospital employ modern technology techniques in its health practices?

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i. E-systems (computers, internet) Yes ( ) No ( )

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9. Does the application of modern technology among hospital staff improve service delivery to the public?

Yes ( ) No ( )