FACTORS INFLUENCING PROVISION OF HEALTHCARE SERVICES IN THE DEVOLVED SYSTEM OF GOVERNMENT IN KISUMU EAST SUBCOUNTY, KENYA

BY
ALOO ZEDEKIAH

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DECLARATION

This project is my original work and has not and has not been presented for any degree in any other university.

Signature…… Date……

ALOO ZEDEKIAH OJUKI
L50/83508/2015

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

Signature…… Date…….

Dr. NIXON OMORO
Department of Business Administration
University of Nairobi

Signature ..... Date.....

Mr. JOSEPH ALUOCH

University of Nairobi

DEDICATION

I dedicate this work to my sisters Joyce, Mercy and Roseline and to my mum and Dad for their guidance and support through this rigorous study.

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I would like to acknowledge my supervisors Dr. Omoro and Mr Aluoch for dedication, support and professional guidance they accorded me during the period of undertaking this project I salute myself for the zeal i put throughout this project, I give special tribute to my family, relatives and friends for their support and encouragement. I also thank the University of Nairobi librarian for his guidance on relevant research materials. It is my sincere thanks to acknowledge the respondents who took their time and effort to answer the questionnaires and respond to interview questions that provided me with information that made this project a success.

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ABSTRACT

Health is an important aspect of human life proper health uplifts social development and also has a direct bearing on development of key sectors of the economy and politics. The United Nations establishment WHO that champions the advancement of human health worldwide through policies, partnerships with various donors and organisations to establish healthcare centres and also give donations to avert humanitarian crises. Many countries worldwide especially developing countries such as Nigeria, India, Brazil and those in sub-Saharan Africa grapple with many problems in the health sector such as few medical staff due poor working conditions and migration, inadequate health facilities, skewed location of health facilities and poor medical equipment supply. Kenya established the KHPF- Kenya health policy framework blue print that gives direction on provision of health services. KHSSP-Kenya health sector strategic investment plan blue print aims to transform the health sector to provide better services in health by reducing infant mortality rates, reducing cases of malaria and incidences of infectious diseases such as H.I.V and T.B. The Kenyan health sector however has had a fair share of challenges that have have hampered its operations. The Kenya health sector was devolved in 2013 in line with the Kenyan constitution since devolution was seen as the best way to provide health services however the decision has encountered numerous challenges that have paralysed provision of health services leading to strikes and many advocating for the reversal of the decision. The research set out to investigate the factors influencing provision of healthcare services in the devolved system of government in Kisumu east sub county by looking at the objectives of location of health facilities, medical staffing, management and medical equipment procurement on provision of healthcare services. The research uses a descriptive survey research design and a case study design in studying the factors, the research targeted medics and patients twenty two health facilities in Kisumu east sub-county which were dispensaries, health centres, sub-county hospitals, one county hospital and one referral hospital. Since the area had few health facilities all the facilities were considered for study and no sample was taken. The research will involve use of qualitative and quantitative data. The instrument of data collection was questionnaires, interview schedule and analysis of secondary data. Secondary data was from ministry of health documents such as reports which were analysed, the data collected was be analysed by descriptive statistics analysis technique, and content analysis technique. The data was also coded and tabulated on frequency distribution tables, the summarized data was analyzed using percentages and frequencies and presented using tables and pie charts and graphs, mean, median mode and standard deviations was analysed with help of Statistical software SPSSv20. From the analysis of the data it most people in the area have medical centres located within a radius of two kilometres and they only travel an average of twenty five minutes with the most preferred means being public unless its an emergency. The medical centres have a shortage of medical personnel with an acute shortage of doctors causing long treatment waiting time for patients. Most of the nurses, clinical officers and doctors feel recruitment of more staff would ease the workload. Concerning management there is a general feeling that the county government lacks the capacity to manage healthcare and that the decision should be reversed poor funding, lack of facilities, corruption and poor payment were some of the factors cited to strongly hamper proper provision of healthcare services most the, ICT was not adequately embraced with computers only found in the registry and many centres lacking CCTVs medical personnel believed allocation of more funds and accountability would greatly solve these problem many strongly believed seminars and trainings would be of great help. A significant number believed solving staff issues on time and construction of staff houses would motivate the medical staff and enhance service delivery. Many people believed procurement of medical equipment was hampered by corruption and lack of accountability, poor policies and poor funding of the medical centres.

LIST OF ACRONYMS AND ABBREVIATION

CEC-county executive committee

CHMTS-county health management team

CoG-council of governors

HCW-Health care workers

HERAF –health rights advocacy forum

HPP-health policy project

HRH- Human Resources for Health

ICC-interagency coordination committee

KEMSA-Kenya medical supplies agency

KHP-Kenya health policy

KHSSP-Kenya health sector strategic and investment plan

KMPDU- Kenya Medical Practitioners Pharmacists and Dentist Union

KNUN -Kenya National Union of Nurses

MOH-ministry of health

OECD-organisation for economic co-operation development

USAID-united states agency for international development

WHO-world health organisation

CHAPTER ONE

INTRODUCTION

1.1 Background of the Study

Proper Health is a fundamental human need hence a good access to healthcare services is a basic human right in social development. Enhancing human capital in coming to and raising expectations for everyday comforts has prompted an attention on interests in the social areas, especially instruction and wellbeing. Wellbeing frameworks should work so administrations can be conveyed and wellbeing experts are responsible to people in general, government and the givers. These segments got expanding consideration and support from the multi-sidelong and bi-horizontal organizations over the previous decade (IMF and World Bank, 2005).The W.H.O has always endeavored to provide proper healthcare services worldwide through various means such as adoption of policies that better the health sector, offering relief food to fight malnutrition in war torn or famine ravaged countries and releasing funds to donors, NGO's, and related institutions to support health related issues such as establishing health centers, provision of medicines and equipment among others. Health has been recognized as a major contributing factor to the realization of the MDG now SDG (World Bank, 2015).

An investigation by Arcury (2005) In the US demonstrated that medicinal services usage is bring down in country zones contrasted with urban ranges, According to Jones (2009), rustic occupants have higher rates of age-balanced mortality, incapacity, and unending malady than those living in urban territories, and they have bring down access to medicinal services regarding reasonableness, vicinity, and quality. These distinctions were seen to be because of reasons, for example, the more drawn out travel separations and less transportation choices accessible for individuals in provincial zones, contrasts in the quantity of doctors accessible, conceivable contrasts in singular attributes amongst country and urban occupants, and One conceivable clarification for bring down medicinal services use in rustic territories is that there are less specialists and masters per capita. Jones (2009) clarified that, numerous country districts don't have adequate patient volume to help full-benefit doctor's facilities, so the provincial social insurance display concentrates on giving essential care and crisis mind locally, while alluding patients to local medicinal services places for specific care. Fordyce et al. (2007) found that not exclusively are there less experts per capita in country ranges, yet that there are additionally less generalists per capita. Their examination discovered, in general, that country territories contained 19% of the populace in the United States

however just 11% of doctors. All the more particularly, they found the quantity of generalists per 100,000 individuals declined from 72 in urban ranges to 55 in rustic zones and 36 in the most detached country regions. An examination in France found that recognition rates of hepatitis C diminished as the separation to the general expert expanded (Monnet et al. 2006). Albeit a considerable lot of these examinations look at particular geographic districts and diverse human services issues, the impact is by all accounts to a great extent general. For instance, an examination in Honduras found that strolling time to the facility adversely affected essential social insurance usage (Baker and Liu 2006).Many countries particularly developing ones experience massive problems in their health care provision with regard to location of health facilities, A study in Burkina Faso, Banglandesh and Brazil showed that vehicle costs represented around 28 percent of the aggregate expenses of utilizing clinic administrations. As per one survey of postnatal passings in North-East Brazil, in an expected 25 percent of cases, moms detailed that postponements in transportation may have added until the very end. In Kenya, 40% of the populace must go in overabundance of a hour to the closest essential medicinal services office (Souza and Peterson, 2000).Developing countries experience poor medical staffing as a hindrance to proper healthcare services provision the ratio of nurse or doctor to patient is wanting. Africa averages 2.3 medicinal services specialists for each 1000 populace, contrasted and the Americas, which have 24.8 social insurance laborers for each 1000 populace. Just 1.3% of the world's wellbeing specialists administer to individuals who encounter 25% of the worldwide infection load. This poor proportion has been added to by relocation of specialists and medical caretakers to nations with great pay and working conditions. The outcomes for a few nations coming about because of loss of wellbeing specialists are progressively perceived and are currently being generally circulated in people in general (WHO, 2003).Unfair hiring is a major factor In Ghana 25% of employments were professedly purchased in government healing facilities. In Uganda 20 percent of civil authorities recognized that the training happened in the wellbeing segment, and in the Philippines 3 percent noted it (Azfar, Kahkonen and Meagher, 2001).A study by Patrick (2013) showed some countries in Africa such as Ghana, Uganda and Ethiopia who have tried to devolve their healthcare services in an attempt to manage and provide better health care have experience massive problems such as corruption and lack of accountability and political goodwill, the devolution only intended to gain political and wealth control.

Procurement of medical equipment is also of major issue contributing to poor healthcare service provision. In Ghana interviews with authorities and general society recommend that 21% of acquisitions in government doctor's facilities are degenerate, and 18% of the estimation of

agreements is required in kickbacks to open authorities (World Bank, 2000d).Drug management in Costa Rica, a well run middle income country, displays specific shortcomings in coordinations and circulation ascribed to imperfect data frameworks and insufficient observing each of these speak to inadequate parts of recordkeeping that trade off endeavors at administration. Poor administration additionally seems to flag defilement in a few cases (Cohen, 2002).The Kenyan government has always endeavoured to provide better health services to its citizens, the establishment of the Kenya health policy framework-KHP provided a blue print that would guide the government in undertaking its mandate of providing better health services to its people, this led to the establishment of the Kenya health sector strategic plan-KHSSP that aims to transform the health sector to provide better services by reducing infant, mortality rates, reduce incidences of malaria, and infectious diseases such as H.I.V and T.B. In 2013 Kenya devolved its health service delivery to the counties in attempt to provide better services however all this have been met by unforeseen challenges of poor funding, in sufficient medical staff and poor infrastructure that have hampered health service delivery (Rok,2010) The health sector in kenya contains people in general framework with real players including the Ministry of Health and parastatals associations, and the private segment, which incorporates private revenue driven, Non Governmental Organizations, and Faith Based Organizations offices (RoK, 2010). The administration wellbeing administration is supplemented by exclusive and worked healing centers and facilities and religious organizations‟ doctor's facilities and centers, which together give in the vicinity of 30 and 40 percent of the doctor's facility beds in Kenya (MoH, 2010). Contingent upon their similar favorable position, Non-Governmental Organizations, Faith Based Organizations and group based associations (CBOs) embrace particular wellbeing administrations (RoK, 2010). Kisumu East sub-county is located in the vast kisumu county and just like many sub-counties in Kenya has experienced the many challenges resulting from the devolution of healthcare services to the counties in 2013 as per the constitution such as; inadaequate health facilities, delay in funding, few medical staff, poor management and lack of a proper system for medical equipment procurement (MOH, 2014).

1.2 Statement of the Problem

In its attempt to provide better healthcares services Kenya devolved its healthcare to the county government however it has faced numerous challenges such as; inappropriate management structure, inadequate staff and delayed payment that have often led to strikes and paralyzed the delivery of health services, this has often resulted in a raw pitting county health officials against

those of the national government with some suggesting health management be returned to the central government. In an interview with council of governors health committee chairman he claimed that the health cabinet secretary through his comments carried on Sunday Nation daily paper on August 23, 2015, and his numerous TV interviews he marshaled district wellbeing staff to strike. He over and over blamed regions and governors for fumble of province funds. This is computed to make the conditions for his expressed plan to return wellbeing administrations to the National Ministry of Health. The Cabinet Secretary has on many events declined to respect solicitations to meet the governors to talk about issues influencing the general wellbeing part.A research by DI in August and November 2014 showed that there are imminent problems that plague the health sector in Kenya; Firstly, power struggle: there is jostling and battle for power and control over the health sector leading to conflict pitting the governors and the health cabinet secretary this consequently affects the management of health sector in counties the governors in 2015 refused to sign a deal of procurement of cancer machines to the county with the government the main motive being control over a lot of resources thus causing a stalemate and lack of diagnosis machines and negatively affecting cancer treatment. Secondly, insufficient funding: in 2014 Out of the Sh9.7 billion meant for counties, some counties did not get their full allocation. Kiambu County was owed Sh129 million meant for Level 4 and 5 facilities for maternity services provided. Kisumu County was owed Sh55 million this greatly affected procurement of medical equipment hampering service delivery. Thirdly delayed disbursements: counties in general experience delayed disbursement from the National Treasury. The delays experienced during the transition between one financial year to the next unfortunately has led to strikes with nurses and doctors complaining of lack of medical equipment and drugs, (MOH,2015). Fourthly favouritism in promotions: counties started functioning in May 2013. This notwithstanding, the national government through MoH continued promoting staff already working in counties in total disregard of constitutional arrangements prevailing. This continued until August 2014 when the Transition Authority stopped the MoH from undertaking more promotions. The promotions were not supported by budgetary allocation in counties and neither were there consultation and/or communication with counties. This unclear policy led to very many unsatisfied staff and the promotion of individuals who many medics felt did not deserve the promotion on account of skills and performance, health practitioners became resistant to being part of the County governments and a number of doctors resigned from government health facilities to join the private sector or work in other countries. The doctor-patient ratio stands at 1 doctor to 17,000 patients. Poor promotion and un-harmonized salaries and allowances, perpetual delays in payment

of medical employee's salaries, if not solved will lead to migration of doctors and further affect health service delivery.

It is therefore apparent that there are imminent problems plaguing the health sector in Kenya with regard to medical staffing, management, funding and procurement of medical equipment and creation of more health facilities. This research sets out to investigate these variables and try to establish the solution. It also sheds light on the reality of healthcare sector in Kenya under the devolved government and whether the goals of health devolution in the Kenya health sector strategic and investment plan - KHSSP, such as universal and better access to health services are likely to be achieved in the current health set -up and what needs to be amended in the Kenya health policy framework-KHPF to address the problem.

1.3 Purpose of the Study

The purpose of this research was to examine the factors influencing provision of healthcare services in the devolved system of government, a case of Kisumu east sub-county.

1.4 Objectives of the Study

The study was guided by the following objectives:

1. To determine how location of health facilities influence provision of healthcare services in kisumu east subcounty.
2. To establish how medical staffing influence provision of healthcare services in kisumu east subcounty.
3. To examine how management influence the provision of healthcare services in kisumu east subcounty.
4. To determine how procurement of medical equipment influence provision of healthcare services in kisumu east subcounty.

1.5 Research Questions

This study sought to answer the following research questions:

1. How does the location of health facilities influence provision of healthcare services in kisumu east sub-county?
2. How does medical the staffing influence provision of health care services in kisumu east subcounty?
3. How does management influence provision of health care services in kisumu east sub county ?
4. How does procurement of medical equipment influence provision of health care services in kisumu east sub-county?

1.6. Significance of the Study

It is hoped that the findings of the research will help the ministry of health to know measures to put in place in order to achieve the goals of Kenya health sector strategic and investment plan (KHSSP) which is attaining the highest possible health standards in a manner responsive to the population needs. It will also be beneficial in the ministerial strategic and investment plan guided by the Kenya health policy KHP (2014-2030) and the vision 2030 health plan under the social pillar, the government will know the policies to adopt to ensure proper provision of health services. This study also adds important knowledge to the devolution of health and the lesson we can learn from developed countries as far as health devolution is concerned.

1.7 Basic Assumption of the Study

The researcher assumed that the people interviewed gave the correct information and that what was observed was the true reflection of the area under study, it was also assumed that information given by the respondents in the questionnaires was a true reflection of the reality on the ground. It was also assumed that medical centres selected for the study gave a true picture of the reality on the ground.

1.8 Limitation of the Study

The kisumu east subcounty area is expansive and has numerous health centres scattered which means that high travelling costs was incurred, however the research used questionnaires to help gather information within the shortest time possible. A pilot test was conducted in kisumu west

sub-county area which has similar characteristics to try and determine the suitability of the method for study in the area and prepare for the challenges that were likely to be encountered. most of the medical stuff were on strike greatly hampering the interview process, the administrators and in charge had to be involved so often to help administer the questionnaires.

1.9 Delimitation of the study

The research has been delimited to the boundaries of kisumu east Constituency due to adherence to ethical issues from the University and NACOST to conduct the research only within the borders of the Kisumu east sub-county.

1.10 Definitions of significant terms

Healthcare Provision: This refers to the act of providing, giving healthservice, the furnishing of medical, nursing, hospital service, optometric service, complementary health services and other health related services.

Devolution: The Transfer or delegation of power to a lower level by the central government, usually a local or regional administration in the Kenyan case counties

Medical staffing: This refers to the act of hiring, employing people to work in the health organisation who are the nurses, doctors and clinical officers.

Equipment Procurement: The act of obtaining or getting medical equipment

Management: The administration of the organisation in the undertaking of healthcare

Facilities: The building, place where the medical services are located.

1.11 Organisation of the Study

In this study Chapter one highlights the background of the study, problem statement, purpose of the study, objectives, research questions, assumption, delimitation and limitation of the study, of the study and definition of significant terms. Chapter two presents relevant literature based on the study objectives theoretical framework and conceptual framework and while Chapter three presents the research design which is descriptive survey design and a case study design, the research methodology, target population, sample size, sample procedure, research instruments, pilot testing, validity of research instruments, reliability of instruments and data analysis techniques. Chapter four presents the data analysis, presentation, interpretation and discussion while chapter five presents summary of the findings, conclusion and recommendations.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter looked into empirical studies done on factors of location of healthcare facilities, medical staffing, management of healthcare services and medical equipment procurement on provision of healthcare services, it also looks into a theory that has a bearing on the research work and a conceptual framework depicting how the variable are interrelated with the indicators that define them. The chapter ends with a summary of the literature review.

2.2 The concept of Healthcare Services Provision

The objective of wellbeing administrations arrangement is to enhance wellbeing results in the populace and to react to individuals' desires while decreasing imbalances in both wellbeing and responsiveness. The social insurance needs of the populace ought to be met with the most ideal amount and nature of administrations created at least expenses. Sorts of contributions to wellbeing administration arrangement to a great extent decide conveyance of the administrations. The authoritative structure and procedures decide amount and nature of yields for a given amount of information sources. The amount and nature of administrations and their circulation, together with other wellbeing framework and non wellbeing framework factors decide how much wellbeing increase can be accomplished in the general public. Viable scope of populace with wellbeing administrations is dictated by components, for example, openness, accessibility, moderateness and worthiness, which are all affected by components of supplier execution. The appraisal of supplier execution can illuminate approach choice with the proof on the normal or the genuine commitment of suppliers' expert activities into the accomplishment of the middle of the road and last objectives of wellbeing frameworks. (WHO, 2005).

Aiken (2005) health study in the US revealed that proper health system provision analysis should focus on three areas: health system inputs, organizational structure processes, and the quantity and quality of personal and non personal health services in relation to health care needs of population. The outcomes of health service delivery process should be captured by the measurement of the overall level and the distribution of health. The outputs of the health service provision process on the other hand can be monitored by the degree to which systems achieve effective coverage of the population with critical health interventions. Effective coverage of a health system can be

characterized as the proportion of the acknowledged wellbeing pick up from an arrangement of intercessions (weighed by the wellbeing hazard) over the aggregate potential wellbeing increase conceivable if suppliers performed at their ideal level for a given wellbeing framework. This applies to both individual and non individual wellbeing mediations. The results of the administration arrangement work along these lines will be thought about the general level and dissemination of the soundness of populace.

The WHO (2004:15) declares that a good health framework conveys quality services to all individuals, when and where they require them. The correct design of administrations differs from nation to nation, yet in all cases requires a strong financing system; an all around prepared and satisfactorily paid workforce; dependable data on which to base choices and approaches; all around kept up offices and coordinations to convey quality drugs and advancements. From social insurance chairman point of view, quality is viewed as giving "viable care in a cost-cognizant condition that may incorporate apportioning of human services particularly when assets are restricted" From a framework viewpoint, quality is accomplished when medicinal services procedures and exercises are outlined and actualized keeping in mind the end goal to consistently live up to patients' needs and desires (Al-Assaf WHO, 2004:15). Along these lines understanding patient's desires is central to the arrangement of nature of administration which eventually has affect on their fulfillment (Dyck, Clapper and De Jager, WHO 2004:227).

2.3 Location of Health Facilities and Provision of Healthcare Services

Provison of health services due to location of health facilities is affected by issues such as travelling costs, whether the service is an emergency, whether better services are located there and also if the people are aware the services. A health system is composed of various elements such as infrastructure, human resources, data system and financial system. Adequate infrastructure which includes buildings, equipments, supply and communication equipment forms a crucial part for health services, Poor infrastructure generally leads to poor quality of service, which in turn not only wastes resources but is dangerous to health and welfare of the patients and community at large. The poor suffer more if government services are not functional or are of poor quality as they do not have any other choice. Infrastructure therefore affects delivery of medical services in various ways, bad roads negatively affect the delivery of medical equipment and drugs and also staff, ICT affects communication and collection of data in the field (WHO, 2003).

A study In Great Britain noted that in colorectal screening more than 27 percent of the total cost of the procedure was accounted for in travel costs (Frew and Wolstenholme, 1999). The same study showed that this cost fell disproportionately on poorer households. A world bank study in U.S by Kaufman and Kraay (2003), showed that patients living more than 20 miles away from a hospital were much less likely to visit ambulatory services for follow up. The death rate in the first year wss also much higher for this group although the relationship with treatment may not be have been causal. In Japan one study found that access to follow-up treatment following treatment for cerebrovascular disease was considerably influenced by access to suitable transportation (Araki, 2006).

Nemet and Bailey (2000) study of the relationship between distance and utilization of health care by a group of elderly residents in rural Vermont, focusing on a county on the Canadian border where 82% of the residents live in rural areas found that people who had to travel more than 10 miles to their physician tended to go to their physicians less frequently than those who had to travel shorter distances. Goodman et al. (1997) also studied northern New England, including Maine, New Hampshire, and Vermont, and found that those who lived farther from the hospital were substantially less likely to be hospitalized for medical illness. Distance to regular care services was found to have a significant negative relationship with the number of regular care check-up visits in a study of rural North Carolina (Arcury et al. 2005).

Apart from location issue of how long patients waited before seeking treatment was also of concern. According to a study in Philippines, location was the main determinant of the delay between onset of illness and presenting for treatment (Wagstaff, 2003). Other factors such as price and income were the principal determinants of the type of facility visited. An Indian study showed that although the effect of distance on use of public facilities for childhood respiratory illness was positive or insignificant, the impact of distance to the nearest private facility on use of public facilities was unambiguously positive (Bhatia and Ganatra,2004). In other words, if a private facility is close by, a household prefers it to a public facility. The result was particularly important given the “essential and primary” nature of the disease studied, for which government facilities might be expected to have a comparative advantage. Similar interactions were also found in Pakistan for general use of private facilities where women would travel long distances to obtain private care, perceived to offer better quality than public services (Bhatia, 2001).

In India delivery of health services lags behind due to poor infrastructure especially in the rural areas. Most rural health care and district health system infrastructure is primarily for family planning and maternity (Townsend, Khan and Gupta,1999,T.K Sundari Ravindran,1999). Many studies show that lack of infrastructure, equipment and supplies led to delays in treatment of women with complications of delivery. In the southern states of india such as Tamil Nadu Pradesh and Kerala-there has been some progress in making maternal services 24 –hour. The private sector has also emerged rapidly to try and fill the void left by insufficient delivery of health services NFHS statistics show that between 1992-1999 the number of institutional deliveries in the private sector increased form 11% to 17%. Data shows that 75% of hospitals and 38% hospital beds are in the private sector (GOI 2003).The private sector share is higher in the state of Gujarat. A study done on this rural region show that 81% of institution providing in patient care are in private sector(Mavalanker, 2001).Many private companies are also setting up large multi-specialty hospitals in urban areas with high investment. Infrastructure in health is rapidly expanding and becoming sophisticated in the private sector. People residing close to cities are often willing to bypass local facilities, traveling to higher level facilities in urban areas which are perceived as better quality. These results were found in Bangladesh (Ensor, Hossain et al. 2001).

In Nigeria it was observed that women in rural areas walk 26 miles to seek medical assistance while In Niger it was observed that utilization rate of health facilities diminishes with distance and the quality of transportation and road conditions. Similar findings have been documented in other African countries. 64% of pregnant women spent at least 60 min travelling to a health facility in Ghana mainly by bicycle or walking With road conditions, particularly those that are dry weather roads, the problems of accessibility worsened with heavy rains study by O'Meara in Nigeria found that hospitalization from malaria was greatly reduced when primary health facilities were within a two-hour walk. Another study showed that risk of mortality doubled after a walking distance of four hours to a health center (WHO, 2007).

A study in Burkina Faso, Bangladesh and Brazil showed that transport costs accounted for about 28 percent of the total costs of using hospital services. According to one review of postnatal deaths in North-East Brazil, in an estimated 25 percent of cases, mothers reported that delays in transportation may have contributed to the death It was also noted that arbitrary subsidies for transport were likely to be counterproductive in promoting bypass of basic facilities and unless health facilities are seen to provide good quality services, people will continue to avoid them even if transport is financed (Souza and Peterson, 2000).

In Zimbabwe an investigation by Fawcus (1996), uncovered that up to 50 percent of maternal passings from discharge could be credited to the nonattendance of crisis transport. However, in the meantime, separate is likewise refered to as a reason ladies convey at home as opposed to at a wellbeing office Location is a particularly critical factor in the uptake of obstetric and especially delivery services. Access for emergency deliveries is clearly hampered by long distances.

In Nigeria health establishments are concentrated in the industrial and commercial parts of the country, the distribution of the state general hospitals and local community dispensaries is structurally and geographically imbalanced. Usually, the rural dwellers suffer more in this regard. The private sectors whose primary motive is profit maximization operate more in the urban centres (Adano, 2008). In Uganda Amooti-Kaguna (2000) noted that women living far away were less likely to choose a health facility for delivery although their inferior access makes them the most vulnerable group in case of an emergency. In Uganda the poor were more likely than the better-off to spend time traveling to facilities where the quality was higher, possibly because the opportunity cost of their time. In one study in Cameroon and another in India, where the better services were situated farther away from much of the population, quality of care appeared to increase utilization despite the costs of travel (Tembon, 1996).

Many studies reveal the unsurprising fact that household use of services tends to decline
with distance. This is a key reason urban citizens who are often also wealthier use services more than their rural counterparts. Lower rural access, reported in many studies, may well be the impact of an interaction between longer distances and less knowledge of treatment. This result is a key driver behind the often quoted finding of benefits-incidence studies that rich, urban citizens benefit more from public subsidies than do poor, rural citizens (Demery, 2000).
Generally there is massive under investment in the health infrastructure sector in many developing countries. There is also tendency to construct hospitals or health centres without providing adequate staff, equipment, supplies or maintenance provision, also poor location of hospitals away from the main population with no accessible roads. To promote hospital delivery and consultation campaigns have often been mounted in various countries, Education and information campaigns in Nigeria, Sierra Leone, and Ghana all led to significant reported increases in attendance at normal and complicated deliveries as a result of the intervention. The Nigeria was reported to have a significant positive impact on awareness of obstetric complications but no impact on referrals (Gummi, Hassan et al. 1997). Similarly, a campaign to target men and women to

overcome cultural resistance and create awareness in India showed little benefit (Bhatia, 2004). In the latter case it is argued that inflation and other economic factors began a general decline in facility-based delivery that the intervention halted but did not reverse.

The Kenyan government has always strived to bring health services closer to the people by improving roads and establishing more clinics in many areas. Many health outreach programs have been started by the government to bring health services closer to the people such as immunization programmes and campaigns on H.I.V and VCTS and advocacy on health issues such as Tupange family planning and partnership with Ngos to bring about centres for disease control-CDCs. Mobile clinics have been used to enhance delivery of health services in remote areas and the government continues to acquire more. The kenyan government has come up with various measures to address this problems such as construction of roads, increasing the coverage of power lines, constructing many police posts for security purpose acquiring mobile clinics, entering into partnerships with the private sectors in ppp. Ngo's identified this gap long time ago and began offering humanitarian assistance and other health services to the people in remote and volatile regions such as Baringo, Turkana and Pokot and to refugees in camps (MoH 2010).

2.4 Medical Staffing and Provision of Healthcare Services

Staffing is arguably the single most important element of health care delivery as little can be achieved without it. Training of the staff, their competencies and ability to function all determine whether labour can drive the expected results. Major issues in medical staffing revolve around qualification, hiring and promotions in the devolved government With the county government recruiting medical staff in Kenya incidences of nepotism, favouritism and corruption have always dogged the process. This is also seen in other developing countries. The complains of medical staff have always revolved around poor pay and long working hours due to few nurses and doctors, low pay and poor working environment (MoH,2013).

There is need for specific contracting of qualified staff. Effective enlistment and maintenance of staff is tied to empowerment of staff that must be dealt with as full accomplices in the doctor's facility operation and given open doors for progression (Brown and Duguid, 2003). To encourage benefit quality and development, doctor's facilities must actualize successful human asset methodologies including specific contracting, and maintenance of doctors and medical caretakers (Cohen and Levinthal, 2001); checking of specialists on staff (or with benefits) and guaranteeing

that they should keep on meeting certain execution and practice models to hold accreditations (Crewson, 2004).

A study by Arcury, (2007) in US showed that a higher level of staffing with RNs per patient day was associated with decreased rates of unplanned extubation, hospital-acquired. A prior cross-sectional investigation of information from 10,184 attendants, and 232,342 patients experiencing general, orthopedic and vascular surgery in 168 hospitals in the United States of America found that an extra patient for every medical caretaker was related with an expansion in both the hazard balanced 30-day mortality and the inability to-protect rate of 7 %.Systematic review of 43 studies in the Western Europe found that richer nurse staffing was related to lower failure-to rescue rates among surgical patients and lower inpatient mortality rates and shorter hospital stays among medical patients. A systematic review and meta-analysis of 28 studies attempted to stratify the effect of nurse staffing by clinical setting and observation of incidences of pneumonia, respiratory failure, and cardiac arrest in intensive care units patients; lower failure-to-rescue rates in surgical patients; and a shorter duration of hospital stay in both intensive care and surgical patients were observed (Aiken, 2010).

Africa averages 2.3 healthcare workers per 1000 population, compared with the Americas, which have 24.8 healthcare workers per 1000 population The already inadequate health systems of Africa, especially sub-Saharan Africa, have been badly damaged by the migration of their health professionals. There are 57 countries with a critical shortage of healthcare workers, a deficit of 2.4 million doctors and nurses. Migration of doctors to the United Kingdom (UK) reached a peak in 2003 when 18,701 doctors were newly registered with the General Medical Council; 13,967 (74.7%) were from outside the United Kingdom. By 2007 the numbers of international medical graduates (IMGs) registering with the General Medical Council was down to 5055 (45.2%) of the 11,188 new registrations (WHO, 2008).

In the Americas, the quantity of medical caretakers per 10,000 populace ranges from nations at the most reduced end, for example, Chile which has a proportion of 1.4 attendant for every 10,000 populace; to those with most astounding proportions, for example, Canada with 92.9 medical attendants for each 10,000 populace (WHO, 2014).Similarly, OECD nations have communicated worry about the deficiency of attendants and its effect on access, wellbeing and nature of wellbeing administrations. The dominant part of OECD nations report nurture deficiencies: Australia predicts a deficit of 109 thousand medical caretakers by 2025 (Health Workforce Australia 2012). In a UK study (NHS Employers 2014, p.14).83 percent of studied associations

detailed encountering deficiencies of qualified nursing workforce supply. Research confirm demonstrates that healing facilities with a higher proportion of medical attendants to patients have bring down death rates (Aiken, 2014). Additionally, bring down attendant staffing, expanded workload, and temperamental nursing unit situations were connected to negative patient results including falls and pharmaceutical mistakes (Duffield, 2011). The nursing deficiency has implied that attendants frequently work extend periods of time under upsetting conditions, which can bring about weariness, damage and employment disappointment. Medical caretakers in nations with deficiencies convey overwhelming workloads and are depleted, as other nursing staff has left for better-paid employments in the private segment or for circumstances abroad. Employment disappointment is on the ascent because of expanded workloads, longer hours and not having the assets to give quality care (Aiken, 2013).

In the US, it was observed that hospitals contract roughly 5,000 outside therapeutic graduates every year to fill first-year residency positions. In the meantime, US medicinal schools dismiss a great many US candidates with high review point midpoints (Mullan, 2000).In 2011, Greece had by a long shot the most noteworthy number of specialists per capita (6.1 for each 1 000 populace), trailed by the Russian Federation and Austria. Chile, Turkey and Korea had the least number of specialists per capita among OECD nations, with around two specialists for every 1 000 populace. This contrasts and an OECD normal of a little more than three specialists for every 1 000 populace. The quantity of specialists per capita is much lower in some rising nations, with short of what one specialist per1 000 populace in Indonesia, India and South Africa. The development rate was especially quick in nations which began with bring down levels in 2000 (Turkey, Korea and Mexico), and in addition in Australia, the United Kingdom and Greece. In Australia and the United Kingdom, the expanding number of specialists has been driven primarily by a solid ascent in graduation rates from household therapeutic training programs (OECD, 2014).In Bosnia and Herzegovina report showed that bribes were particularly common in the health sector with surveys of officials and citizens reporting that 75 percent thought bribes were required for obtaining positions and for promotion (World Bank, 2001e). In Ghana 25% of jobs were allegedly bought in government hospitals. In Uganda 20 percent of municipal officials acknowledged that the practice occurred in the health sector, and in the Philippines 3 percent noted it (Azfar, Kahkonen and Meagher, 2001).

In Burkina Faso, many of the small health centers though serving at least 2000 villages-have no doctors and are run by nurses . During outbreaks, these small health centers lack the facilities to

deal with an increase in patient numbers, (WHO,2007). In Malawi Mphande (2014) noted that there is a critical shortage of nurses and the country has only 25% of the required numbers. In 2010 Malawi had a nurse/population ratio of 1.7:10,000 and the ratio is said to have improved to 3.4 nurses per 10,000 population; but this ratio is still low compared with the WHO recommended 50 nurses per 10,000 population. The situation is similar in other Southern African countries (Nullis, 2007). South Africa has 39.3 nurses per 10,000 population, but a high percentage of these work in the private sector and shortages are especially acute in rural areas. This shortage is one of the challenges for expanding AIDS care and treatment services in the country. In Lesotho, which is also ravaged by AIDS, there are just 6.3 nurses per 10,000 population and more than half the nursing jobs were vacant leading to poor access to health services.

In South Africa, a study showed that teaching hospitals fail to attract or retain good instructors, the quality of medical graduates produced is dropping (Paton, 2006)World Bank contends in a recent publication representing that institution's most detailed report on migration and remittances that "the impact of the brain drain on welfare and growth is likely to be significantly smaller, and the likelihood of a negative impact on welfare and growth significantly greater, then reported in the literature" (World Bank Report, 2005).

Low wages has been observed to also lead workers to seek additional employment outside government, In Kogi State, Nigeria, 42 percent of the medical staff had not been paid their pay rates for over a half year in the previous year (Das Gupta, Gauri and Khemani, 2003), changing over staff into virtual volunteers and dissolving the validity of the wellbeing framework. Notwithstanding the Nigeria state, reports from Ethiopia, Mozambique and Uganda (Lindelow, Serneels and Lemma, 2003; Lindelow, Ward and Zorzi, 2003; Azfar and Gurgur, 2001) demonstrated that the need extra wellsprings of wage viably traded off suppliers' capacity to do their open obligations on the scale planned. In subjective studies wellbeing specialists said they missed work or slice short their hours to commit time to other financial exercises. Another examination in Nigeria demonstrated that the more prominent the slack in paying pay rates the more probable wellbeing specialists were to participate in pharmaceutical deals and look for other work in the private segment (Khemani, 2004)

In Ethiopia health officials complained about unfair hiring practices, nepotism and preferential treatment to well connected individuals. Similarly in the Dominican Republic "patronage propelled personnel rolls" leading to one of the highest rates of health personnel to population in

the region. Promotions routinely rely on recommendations from politicians, and military authorities that lead to a mismatch between skills and needs (La Forgia et al, 2004). An earlier study found that most care was already provided by under-trained medical students operating on patients without supervision (Lewis, La Forgia and Sulvetta, 2004).

A study in India showed that due to low number of doctors and nurses the government hired interns on temporary contracts to fill the void, many medical practitioners seeking employment would volunteer and work on part time basis. In the private part, a variety of services are given, in both urban and rural territories, by solo works on running from unregistered "quacks" to enrolled restorative specialists to little nursing homes and poly facilities. There are gauges that as much as 40 percent of private care was given by unfit suppliers. (Bhatia, 2014).
In 2006, WHO noted that despite the global shortage of nurses, nurse graduates in some countries are unable to find employment. reported that nurses in Grenada, Uganda and Zambia were faced with unemployment as their health systems could not afford to pay their salaries (WHO, 2006). Even in industrialised countries, such as Australia, there were nurses who are without employment. The Australian Nursing and Midwifery Federation (ANMF) reports that more than 3,000 highly-educated Australian nursing and midwifery graduates are unable to find permanent jobs, and that this remains one of the profession's biggest workforce issues (ANMF, 2014).

In 2005, Volqvartz found that although half of all nursing positions in Kenya were unfilled, a third of all Kenyan nurses were unemployed (Volqvartz 2005). Similarly many nurses in Tanzania, the Philippines, and parts of Eastern Europe were obliged to work for free in order to maintain their competencies, with the hope that the system would employ them when a budgeted position became available (Kingma, 2008). Unemployment of health professionals has occurred as the health workforce seemes to be considered as a drain on the budget and some countries even put a brake on recruitment of health professionals while needs for health services were high (WHO and World Bank 2002). Healthcare reform driven by cost containment measures such as reduction of public expenditure and wages, privatisation of public services, devaluation of currencies and elimination of subsidies has resulted in deterioration of services and erosion of the health workforce (Liese and Dussault 2004).

In Kenya a study done in Kenyatta hospital showed that the poor staffing has resulted in high turnover and weak morale among staff making it difficult to guarantee 24-hour coverage resulting in problems with patients care and increased cost of operations due to inefficiencies (Owino and

Korir, 1997) Low employee's capacity led to a decrease in provision of service quality public health sector by factor of 0.98.Whereas there has been an attempt to improve the situation (RoK, 2010) it seems not much has been achieved in raising the quality of service in public health institutions and this is compounded by limited information on the factors that ail the delivery of service quality in the public health sector in Kenya. This research sets to explore the technicalities of staffing in the medical field and how to address the problems.

In the U.K there are specialised doctors and locum doctors who are doctors of any grade or specialty were called upon to act in case of the unavailability of medical staff, this ensures continuity in provision of health services in the event that there are strikes by the medics (NHS, 2010). Developing countries still struggle with many problems in the recruitment of medical staff mainly due to unavailability of funds and their attempt to devolve health functions has not been a big success due to factors such as and corruption and lack of political will. In Kenya such arrangement is lacking with the KDF doctors being called in place to cover for the medics when on strike and quack doctors establishing and operating illegal clinics thus compromising health provision standards (RoK, 2013).

2.5 Management and Provision of Healthcare Services

A good management system is key to the proper running of health care provision services, the management issues in health services revolve around policies, communication and ICT, addressing staff working conditions, supervision and accountability and deployment of staff. This has seen many countries especially those developed devolve their healthcare. In Dominican republic and Latin American countries report showed overall management of health systems, hospitals and clinics typically fall to physicians, few of whom have the training or experience necessary to effectively carry out their jobs. This poses a major problem in their move to reform the health system (World Bank, 2003c).

International council of Nurses-ICN noted that nurses are expected to play an active role in managing healthcare resources including equipment and supplies. Nurse managers have a significant role in resource allocation and budget decisions. At the same time, nurses must use supplies and equipment effectively and should be aware of how much supplies cost and how waste occurs. Nurses must recognise when supply and equipment is inadequate and when patient safety is endangered as they have an ethical duty to lobby for needed supplies (ICN, 2012a).

One study by Aiken (2007) in the US showed that nurses working within positive environments are encouraged to work to best practice and work effectively with multidisciplinary team members which in turn promotes the quality of care provided and results in better patient outcomes a positive practice environment for nurses is characterised by quality management, an emphasis on the need to develop staff, the presence of frontline managers with supervisory abilities, and good relationships between nurses and physicians.

Friese et al (2003) in a study in France found that both an unfavourable practice environment and nursing education were significant predictors of failure-to-rescue rates. Similarly, in an analysis of secondary data on 10,184 nurses and 232,342 surgical patients in 168 hospitals, Aiken et al. identified independent inverse relationships among the nurse-to-patient ratio and the proportion of nurses with baccalaureate degrees and adverse patient outcomes.

In Uganda devolution was introduced in 1997 as a way to properly manage health under local government Act. The primary concentrate was on instruction, wellbeing, and horticultural counseling administrations, and the administration of regular assets in Uganda. (Bernard Bashaasha, 2011) Studies demonstrate that there has been no change in wellbeing administrations with numerous wellbeing status markers either stagnating or exacerbating. All in all, decentralization of training and wellbeing administrations has not brought about more noteworthy investment of the normal individuals and responsibility of specialist co-ops to the group. Absence of group investment, lacking monetary and HR, a tight neighborhood assess base, a feeble common society, underscored the need to improve them if devolution somehow happened to achieve the expected outcomes. The contextual analysis from Uganda alerts against the propensity to romanticize devolution as the recently discovered answer for past and current institutional and financial mutilations and contends that devolution itself can make state foundations more receptive to the requirements of the groups, however just on the off chance that it enables neighborhood individuals to consider open hirelings responsible and guarantees their cooperation in the advancement procedure (Patrick, 2013).

In Ethiopia the concept of devolution and health management was introduced in 1996 and seen as the primary strategy to improve health service delivery in Ethiopia. It formed part of a broader devolution strategy across different sectors of which healthcare was one. Devolution first took place at regional level and was further extended to the district, or woreda, level in 2002.(Sameh, 2009) Ethiopia adopted, a four-tiered system of Health care facilities which consisted of national referral hospitals, regional referral hospitals, district hospitals and, lastly, primary healthcare

facilities. Through this devolution instruments, districts received block grants from regional government and they, thus, were qualified for set their own particular needs and decide additionally spending distribution to human services offices in view of nearby needs. Therefore the area levels were in charge of human asset administration, wellbeing office development and inventory network forms. Noteworthy change of administration conveyance was seen regardless of a few difficulties in the underlying stages. It was found in Ethiopia that correspondence channels with groups were not settled while the inverse is valid for Ghana where instruments for nearby group cooperation have been set up at various levels In Thailand, there was an expanded level of responsiveness to the group the wellbeing focus worked in and the patients it provided food for this in thusly affected decidedly on group investment and accordingly, wellbeing focuses found the quantity of patients going to wellbeing focuses had expanded (Sameh,2009).

In Ghana Decentralisation has played a pivotal role in government policy ever since Ghana became an independent country. Following the 1993 Local Government Act, the District Assemblies' responsibilities were limited to activities in the field of public health health promotion and disease surveillance and control. The Ministry of Health has delegated the responsibility of managing its facilities to an autonomous entity created in 1996, the Ghana Health Service (GHS, 2010). The GHS is responsible for managing and operating most of the country's facilities and offices. The GHS subsequently evolved into a more deconcentrated structure with regional and district health offices. Although both structures are based on the principle of delegation and deconcentration at a district level, there is not one single authority for coordination of health service delivery on a district level. lack of proper management structure, accountability and political goodwill hampered it success (GHS,2010)

In Thailand devolution of health services mainly focused on primary health centres and the transition of ownership from the Ministry of Health to the Local Authority Organisations -LAOs Before devolution, health centres had little autonomy and, through the aforementioned act and guidelines developed by the Ministry of Health, the health centres were given the option to either perform services under the flag of the Ministry of Health or to devolve to the LAO-level. However, devolution of health centres only occurs if two conditions are met (HPP, 2014). First, the LAO must have received a good governance award demonstrating that it is capable of managing the health centre. Part of this also implies that sufficient funds are earmarked by the LAO for health-promoting initiatives. Second, at least half of the health centres' staff involved need to be willing to transfer to LAO employment. In Thailand there was limited change to existing governance structures, which created an additional line of accountability for those health

centres that did devolve. In general, governance structures should balance the trade-off between transparency versus the administrative burden it puts on health facilities or regional government departments. There were no escalations mechanisms put in place for LAOs, which raises the question of what will happen and who will act upon unwanted events at health facilities residing under these LAOs. In Thailand, there was a growth in political influence as health centres moved closer to the centre of political decision making – or so it was perceived by staff working in these devolved health centres this is similar to the Kenyan situation where politics affect flow of resource such as funds and acquisition of medical (HPP, 2013).

In Ghana it was noted by Ghana Health System that although the building blocks were in place in the devolved health system, the governance and accountability structures to let them 'talk' to each other are not fully developed yet. In Thailand, it was found that health centres that devolved to Local Administrative Organisations (LAO) experienced more management flexibility and quicker decision making. This logically follows the shorter chain of accountability since staff experience management of LAO to be 'closer' to them compared to the provincial Department of Health (HPP, 2014). In Thailand There seemed to be a relationship between those health centre heads that were closer to the LAOs' CEO and the funds these health centres received. This had a negative effect on those health staff still deciding on their vote to devolve their health centre, ie to transfer their employment contract from the Ministry of Health to the LAO level (HPP, 2014).

The Kenyan government devolved health services to the county in line with the 2010 constitution (Republic of Kenya gazette notice no.137, August 2013).The health management structure in counties consist of an executive secretary at the apex, a chief officer, a director, the county health executive committee (CEC) and the county health management team (CHMT)).The management system was deemed efficient but it suffers from many human resource challenges, lack of proper communication and information flow which hamper accountability and mechanism of addressing employee grievances (HPP, 2015).

A conference report by HERAF (2015) on behalf of Kenya Medical Practitioners Pharmacists and Dentist union -KMPDU noted that HRH is the key ingredient to an effective health system. It came out that Public Health facilities served up to 96% of the Kenyan population. The HRH pre-devolution weaknesses included: difficulties in recruitment and retention of health workers; poor remuneration according to KMPDU Comparison of Doctors' Salaries 2012, limited training opportunities and career progression; poor working environment and skewed distribution of

doctors. With devolution, the HRH problems compounded many times, and are characterized by tribalism and nepotism, deployment of staff with low capacity; staff harassment, threats and political interferences especially by the County Assemblies and community members rejecting members of staff; retarded career progression and; lack of horizontal and vertical transfers (HERAF, 2015).

HERAF reported hostilities between County Health Managers and Health Workers, too many health workers' strikes and mass exodus of the Human Resource had been experienced. This had resulted into a gap of 83,442 doctors according to the World Health Organization recommended doctor patient ratio. Despite the ongoing challenges, the presenter assured delegates that the future was bright for the country if the highlighted challenges were to be resolved. On the Union, he said that since it's registration it had brought tremendous improvement in HR. Before the Union registration in 2011, the country was losing 7 out of 8 doctors whilst post-registration; Kenya was able to retain 5 out of 8 doctors. He concluded by applauding the Union's efforts which had seen numbers of registered doctors grow from 700 in 2000 to over 3,000 in 2015 (HERAF, 2015).

The nurses union -KNUN noted in the devolution conference that devolution had achieved the establishment of new health facilities in far flung and marginalized areas; purchase of ambulances in some deserving facilities and recruitment of additional staff. Despite the aforementioned strides it was noted that a number of challenges existed key among them being: poor current status of health care attributed to political ego, lack of structures to address the emerging challenges in the healthcare provision; irregular promotions and re-designations which resulted in untimely payment of salaries; irregular salary scales for same grade nurses; ethnic cleansing and cumbersome transfer processes; perennial strikes by doctors, nurses and other paramedics attributed by staff shortages, lack of pharmaceuticals and non-pharmaceutical supplies; insecurity at workplaces and; inability and unwillingness by the National and county Government to address the existing issues due to lack of political goodwill, vested political interest, impartial consideration based on political clout rather than the interest of the healthcare givers/seekers and lack of adequate resources and structures. In conclusion, KNUN called upon HERAF to also advocate for the rights of the nurses since the government had not done enough for nurses. She concluded by calling upon all the relevant stakeholders to take responsibility to improve HRH as appropriate (HERAF,2015).

Successful Technology strategy 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, 2001). Hospitals need to develop a system that allows all caregivers to have access to relevant information as soon as it is available (Oliveira-Cruz, Hanson and Mills, 2001).

A study done by Kenneth, Wanjau, Wangari, Muiruri and Ayodo on Kenyatta hospital in 2012 noted that the ineffective communication channels affected delivery service quality in public health sector by a factor of 0.768. 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 and patients. A good communication system is thus key in health management (Neil, 2001).

Management of health in devolution thus has its unique challenges depending on how its structured, Kenya for instance adopted the full devolution compared to regional countries and had to grapple with many challenges such as poor and delayed payment, and poor working conditions which could not be easily handled leading to creation of HRH ICC. The proposal was to create among other things doctors plaza, staff houses to motivate the medics, having car loans, entering into ppp among others. Uganda on the other hand chose to devolve many sectors including education but failed due to unavailability of mechanism to ensure public participation, Ethiopia chose to devolve to districts and channel grants through regions and registered some positive change even though it also experienced its unique challenges. Thailand chose to roll out devolution in phases at regional and districts level creating a mechanism to assesses management capability at this level before devolving health fully, the regions were to demonstrate that they could handle the devolution first before it was left under their management this had a positive impact in that a mechanism of governance and accountability was created the devolution was to health centre level this sharply contrasted with Ghana that lacked the governance structure (MOH, 2014)

In Thailand health devolution the medics were at liberty to choose whether to remain under national or move to regional level creating flexibility that resulted into a positive impact even though created challenges of political favouritism. In the Kenyan perspective no mechanism was put in place to ensure accountability in the handling of funds leading cases of mismanagement of the funds by the county officials , compared to Thailand the Kenyan government did not roll out devolution in phases therefore no mechanism was put in place to test the management capability of the counties in health, the health practitioners in Kenya had no choice to choose whether to remain under the national government or county but to move straight to the counties thus creating qualms with the unions (MOH,2014).

2.6 Medical Equipment procurement and Provision of Healthcare Services

Medicines and medical equipment account for 20–30% of global health spending, slightly more in low- and middle-income countries and therefore constitute a major part of the budget of whoever is paying for health services . In many cases that burden would be lighter if governments and individuals were paying a fairprice. lack of drugs has been repeatedly shown to discourage utilization of public facilities, the greatest weaknesses were in procurement, specifically in the lack of performance monitoring, quality monitoring, audits and uncontrolled political interference and in distribution where inventory management security and information systems were found particularly deficient. Alleged abuses in service delivery by both health professionals and patients were attributed to lack of controls in prescribing and supplying drugs to patients (World Bank, 2005a).

The Nursing and purchasing departments must communicate to determine the best product for the intended use; and a supply chain management system needs to be in place to ensure that the right supply in the right quantities is delivered at the right time for a reasonable cost A key concern of managing supplies is to ensure adequate stocks to provide appropriate services. Lack of resources in healthcare settings has serious consequences for the quality of care and for the practice environment of nurses and other health professionals (Ellis and Hartley 2005).

In Argentina, Bolivia, Colombia and Venezuela overpayment for supplies in public hospitals was observed which points to corruption in the government. Perceptions of staff, their assessment of the probabilities of getting caught and being punished, and examination of hospital records and comparing these with market prices suggested that irregularities are rife. The poor procurement performance underlying the purchases was attributed to gross mismanagement or corruption (Di

Tella and Savedoff, 2001). In Colombia, it is estimated that about 11 percent of costs could be saved if accepted public tendering rules are followed (Giedion, Morales and Acosta, 2001). Results from surveys of physicians and nurses in Argentina (Schargrodsky, Mera and Weinschelbaum, 2001), Colombia (Giedion, Morales and Acosta, 2001) and Venezuela (Jaén and Paravisini, 2001) show that corruption within facilities leads to overpayment of suppliers, and that combined with the lack of punishment and the low probability of getting caught make it possible. In short, the lack of enforced rules, procedures and accountability effectively allows irregularities in purchasing practices.

In China various studies indicate that on average about 30 percent of public medical and drug supplies are expired or counterfeit (Hsiao, 2005), suggesting poor logistics management, limited oversight and graft. Drug management in Costa Rica, a well run middle income country, exhibits particular weaknesses in logistics and distribution attributed to flawed information systems and inadequate monitoring each of these represent deficient aspects of recordkeeping that compromise efforts at management. Poor management also appears to signal corruption in some instances (Cohen, 2002). Petty theft was considered very common in Costa Rican hospitals where 83 percent of nurses reported thefts (Di Tella and Savedoff, 2001), and in Venezuela where roughly two-thirds of health personnel were aware of stolen materials, equipment or drugs (Jaén and Paravisini, 2001). In Peru, theft by both physicians and nurses was viewed as the most common form of corruption, with the highest estimated prevalence in Ministry of Health hospitals -- 22 percent, double that reported for Social Security hospitals (Alcázar and Andrade, 2001).Nurses are concerned with cost effectiveness, care effectiveness, quality of care and patient safety. The growing presence of counterfeit or fake medicines and substandard equipment is a serious threat to patient safety, as the work of the health team and the quality of care will be compromised or even endangered by fake medicines. Counterfeit medical products are not only unsafe and ineffective; but they can result in wasted resources and missed opportunity to treat or prevent a disease (World Health Professions Alliance, 2011).

Study reported that less than half the facilities in Lagos and Kogi states had government supplied drug stock in 2001 (Adeniyi, 2001). In Costa Rica 32 percent of users indicated that they had prior knowledge of theft in government pharmacies (Cohen, 2002), and in a hospital study in the Dominican Republic comparing patient prescriptions and records of administered drugs a significant proportion of drugs went missing . In Ethiopia a health officer in Addis Ababa noted

that “most health workers are involved in such things theft” attributing this to “outside temptations” and low pay of public servants (Lindelow, Serneels and Lemma, 2003).

In Nigeria 25% of health facilities had about half of the minimum package of equipment, while 40% had less than a quarter of what was needed (World Bank, 2003). In Ethiopia two separate surveys revealed that only 21 percent of public hospitals had autoclaves (sterilizers) and 46 percent had functioning operating theaters, both serous shortcomings given the spreading AIDS epidemic and the high volume of patients (World Bank, 2005b). A study in Udaipur district in Rajasthan, India found patchy availability of basic equipment in health facilities with only a quarter having sterilizers. A third of sub-centers lacked a stethoscope, thermometer or scale (Banerjee and Duflo, 2005). In Colombia price variations were statistically significant across purchases of public hospitals, and particularly different where they ignored the price lists negotiated and endorsed by a local NGO under contract to the government (Giedion, Morales and Acosta, 2001). In Ghana interviews with officials and the public suggest that 21% of procurements in government hospitals are corrupt, and 18% of the value of contracts is required in kickbacks to public officials (World Bank, 2000d).

The average leakage rate for drugs in Uganda was estimated at 73%, ranging from 40 to 94% across 10 public facilities. High demand drugs, such as those to treat malaria, were the least available to patients because health workers and the Health Unit Management Committee members, the entities meant to provide local oversight, expropriated them (McPake et al, 1999). A later facility exit survey in Uganda shows much higher drug availability and distribution, however (Lindelow, Reinikka and Svensson, 2003). In Ghana interviews with officials and the public suggest that 21% of procurements in government hospitals are corrupt, and 18% of the value of contracts is required in kickbacks to public officials (World Bank, 2000d).

In the UK drugs procurement and other medical supplies are handled by the National Institute for Health and Care Excellence NICE (NHS, 2010) , Scotland set up the Scottish Medicines Consortium in . It has a smaller transmit than NICE, focusing on prompting which prescriptions the Scottish NHS ought to and ought not embrace, instead of more extensive wellbeing innovation appraisal.In England CCGs are legally required to make funding available for drugs and treatments recommended by NICE as part of a technology appraisal within three months of its final guidance being published. In the absence of NICE guidance, NHS organisations can determine their own policy on funding but cannot have a blanket policy to refuse particular

treatments and must consider exceptional individual cases where funding should be provided. NICE has also published around 180 Quality Standards, covering the main conditions and diseases, to provide a definition of what high-quality health and social care should look like (NHS, 2010). These standards play a key role in the development of the Commissioning Outcomes Framework, which measures the health outcomes and quality of care achieved by CCGs. The Health and Social Act 2012 requires NHS England and CCGs to have due regard to these quality standards as they fulfil their duties (OECD,2014).

The cancer drug fund was introduced in England in 2010 to enable patients to enable patients to access the drugs that would not be available in the NHS the list of drugs is compiled by CRG-clinical reference group for chemotherapy they have adopted a formal process horizon for scanning for new patients in the specific cohort (NHS,2010).Wales has a Healthcare Inspectorate covering both the public and private sectors, while Northern Ireland relies on a Regulation and Quality Improvement Authority. In England, inspection has morphed its way through various bodies into the Care Quality Commission, which is now, in the wake of the Francis report (Francis, 2013), again rethinking its approach to inspection and regulation.

In Germany the National Pharmaceutical Agency is in charge of all issues identified with the pharmaceutical business, including professionally prescribed medication valuing and repayment strategies. It is responsible to the Ministry of Health and the Ministry of Economy and Finance (Lo Scalzo, 2009). Installment rates for doctor's facility and outpatient authority mind are controlled by every area, with national rates (dictated by the Ministry of Health) as a kind of perspective. All medications, both protected and nonexclusive, are set into bunches with a reference value filling in as a most extreme level for repayment, unless they can exhibit included health advantage. The Institute for Quality and Efficiency is lawfully accused of assessing cost viability of medications with included restorative advantages, prompting either incorporation in the reference bunch if there should be an occurrence of no additional advantage, or value transactions between the maker and the Federal Association of Sickness Funds .Drug organizations are required to deliver logical dossiers for every single new medication showing a medication's additional health advantage, which is then assessed by the Federal Joint Committee and the Institute for Quality and Efficiency inside a three-month time frame. For drugs with included advantage, the Federal Association of Sickness Funds arranges a refund on the producer's value, which is connected to all patients. What's more, refunds are consulted between

singular affliction assets and pharmaceutical producers to bring down costs beneath the reference value (OECD,2014).

Canada has a decentralized procedure of buying most therapeutic guides and gadgets, predictable with a decentralized conveyance framework. Albeit commonplace services of wellbeing are at last in charge of guaranteeing the accessibility and nature of medicinal gear, gadgets and helps as a major aspect of first-dollar scope for clinic and therapeutic administrations, a safe distance wellbeing associations and suppliers really buy most restorative guides and gadgets. Also, most doctors keep up private workplaces and settle on autonomous choices concerning the buy of an expansive scope of restorative hardware, gadgets and helps to help their particular general (family) and expert practices. Singular clinicians, especially pro doctors, assume a noteworthy part in the choices of RHAs-Regional wellbeing specialist and doctor's facilities to buy medicinal gear, including the determination of a specific seller. In the meantime, common wellbeing services can assume a key part in deciding the planning and acquisition of to a great degree costly restorative gear, particularly attractive reverberation imaging (MRI) units and registered tomography (CT) scanners (OECD, 2015).There has been a substantial investment in advanced diagnostics by provincial health ministries and delegated RHAs, Canada has a supply of CT, MRI and positron emission tomography (CIHI, 2012a) scanners roughly comparable to the supply in Australia except for CT scanners, France and the United Kingdom Costs are controlled principally through single-payer purchasing power, and increases in real spending mainly reflect government investment decisions and/or budgetary overruns. Cost control measures include mandatory global budgets for hospitals and regional health authorities, negotiated fee schedules for providers, drug formularies, and resource restrictions vis-à-vis physicians and nurses. The national health technology assessment process is one of the mechanisms for containing the costs of new technologies (OECD,2015).

The federal Patented Medicine Prices Review Board, an independent, quasijudicial body, regulates the introductory prices of new patented medications. This process ensures that prices are not “excessive,” on the basis of their “degree of innovation” and through a comparison with prices of existing medicines in Canada and in seven other countries including the United States and the United Kingdom. The Board regulates “factory gate” prices but does not have jurisdiction over wholesale or pharmacy prices, or over pharmacists’ professional fees. However, prices of all patented drugs are reviewed regularly, and the Board can intervene if price increases are deemed excessive. Since 2010, the Pan-Canadian Pricing Alliance also coordinates, across provinces, negotiations to reduce the prices of branded drugs. Jurisdiction over prices of generics and control

over pricing and purchasing under public drug plans and, in some cases, pricing under private plans is held by provinces, leading to some interprovincial variation (Romanow, 2002).

In developed countries such as Canada drugs and medical equipment procurement are devolved the decisions to purchase the medical equipment is done by the professionals making it a more efficient and faster way of drugs and medical procurement, in Kenya the procurement process is largely centralized causing delays in procurement, In England the medical suppliers body has a say in the management of the procurement body hence help in minimising cases of graft, is there a body that regulates and inspects the chain to eliminate counterfeits and supply of unwanted drugs and generics. There exist a board that controls pricing across the country thus eliminating corruption in procurement department. Drug companies are required by low to publish list of new drugs in the market thus eliminating counterfeit drugs in the market (OECD,2014).

In Kenya drugs and medical equipment procurement is mainly the job of KEMSA. In procurement, first priority is given to KEMSA and second option to MEDS. The latter only delivered to County Referral Hospitals, thus the main hospital has to organize deliveries to other facilities which more often than is a daunting task. On the other hand, some facilities do not have access to computers and hence could not access the online orders. Other challenges included purchase of only generic essential drugs for the health facilities and if not available, it led to inadequacy of drugs in the health facilities. Perennial delayed payment to KEMSA by county governments also affects supply chain management (MOH, 2015).

In the wake of devolution it was noted by MoH that KEMSA had undergone significant transformations so as to serve its clients better, these ranged from reviewing their strategic plan so as to respond to emerging environmental dynamics; aligning their organizational structure to respond to the new business demands of the devolved health care systems; building the capacity of their human resources; leveraging on technology for efficiency and performance improvement and strategically optimizing networking initiatives with a view of serving customers effectively and efficiently KEMSA was fully automated through LMIS and had been rolled out in 35 out of 47 counties. There were plans also to establish a Supply Chain Institute. It came out that Key challenges for the counties has often included the inadequacy of supplies and commodities since only about 50-60% orders were honoured by KEMSA (The national government was still holding 55% of health functions which should be addressed (HERAF,2015).

In an attempt to provide solutions to these problems the country has adopted specific procurement legislation for KEMSA with freedom to engage in pooled procurement; investment in strengthening county government capacity, especially timely orders to KEMSA and distribution; continuous resource mobilization from PEPFAR and Global Fund and; budget line inclusion in national budget to support KEMSA's sustainability. The problems envisaged included: delays in delivery; poor transportation and warehousing; low utilization of existing facilities like Global Fund and PEPFAR.; low capacity to track stock outs by the county governments; Kenya's ranking as a middle income country (MIC) which was likely to result in drugs prices hikes; high rates of corruption; delayed payments by county governments to KEMSA; lack of updated essential drugs list and; lack of knowledge among CSOS on drugs procurement in the devolved system (MOH,2015).In its attempt to devolve procurement of drugs and medical equipment by KEMSA Kenya has experienced numerous obstacles such as lack of track lists in the procurement department and flaunting of procurement rule by county officials, lack of electronic gadgets in the county and corruption have negated the smooth supply of drugs and medical equipment leading to infiltration of counterfeit drugs. This research examines the Kenyan set up of medical equipment and drugs procurement and the best way forward.

2.7 Theoretical Framework

A number of theories have been advanced to try and explain further the management concept in devolution. political and financial reasons adds to embracing decentralization hones in administration in ranges of staffing, acquisition among others. In the created nations decentralization arrangements have been actualized to give open administrations and products in practical ways. In the creating nations it was received to conquer financial wasteful aspects, full scale monetary flimsiness and insufficient administration. Post comrade transitional nations tend to hone decentralization keeping in mind the end goal to move to advertise economy and majority rules system. The African nations embraced it as a method for national solidarity. A few nations, for example, Sri Lanka, Indonesia, Sudan, Ethiopia, the Philippines received it as an answer for ethnic or local clash (Devas, 2005;). In any case, it could be contended that in the act of creating nations interest for decentralization is from outer gatherings instead of nearby individuals. By and large, this request has been gotten from neighborhood and national political elites, improvement accomplices and other worldwide weight.

2.7.1 Accountability Theory

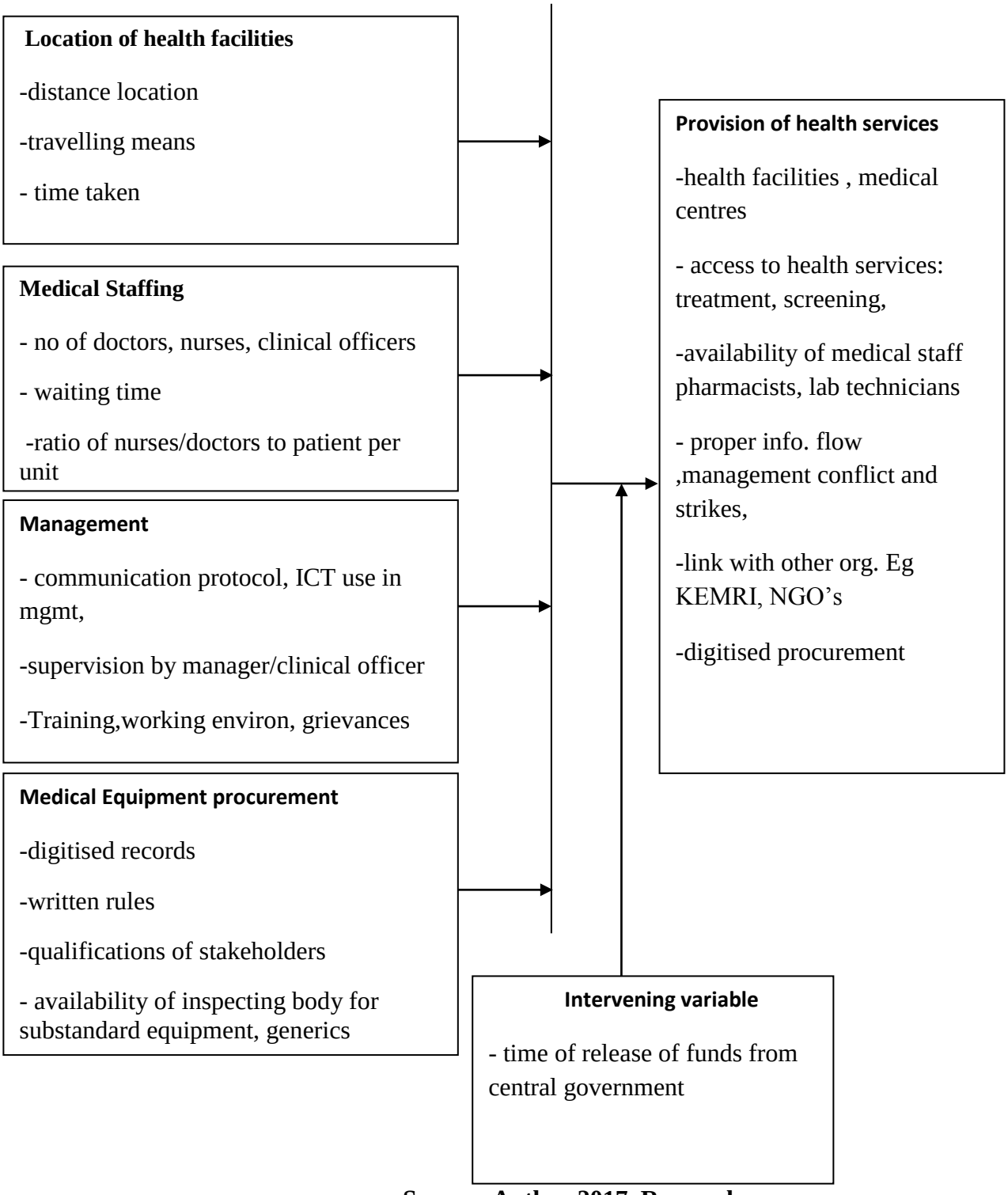
Decentralization is contended to advance responsibility and diminish defilement in the administration (Ostrom, Schroeder and Wynne 1993). Since sub-national Governments are nearer to the general population, subjects are thought to be more mindful of sub-National Governments‟ activities than they are of activities of the Central Government. Likewise, the subsequent rivalry between sub-national suppliers of open merchandise supposedly imposes strain on Sub-National Governments, as residents loath to debasement may exit to elective purview or suppliers. Debasement speaks to a breakdown of helpful conduct, in which the few conspire to the burden of all. Regressing capacities to littler units that are nearer to the populace should in principle increase accord and authenticity concerning the decision of open administrations. This, thusly, can be required to cultivate participation, watchfulness, and also acknowledgment of and adherence to principles of open area respectability. Since regions are nearer to the general population than the Central Government, they are considered to have better data about the inclinations of nearby populaces than the Central Government. According to Rees (1985), principals must unravel two essential assignments in picking and controlling their operators: initially, they need to choose the best specialists and make actuations for them to carry on as wanted. Second, they need to screen the conduct of their specialists to guarantee that they are executing as concurred (Ayee, 2005). An issue emerges when the gatherings' objectives strife or when it is troublesome or costly for the important to confirm what the specialist is really doing. For this situation Information asymmetry presents an issue of unfriendly determination and an ethical danger issue.

In human services administrations arrangement under devolution the responsibility and key office relationship exists, the national government being the key and the lapsed assets administration panels and staffs being the specialists. In the event that the connection between the two gatherings isn't very much checked, at that point the issues related with the organization hypothesis, similar to the data asymmetries will undoubtedly happen therefore constraining the effect of the reserve. Basic to this is irreconcilable situation. While the administration might need to make arrangements and wellbeing effort extends that will enhance the lives of the objective gatherings, the region wellbeing official advisory group may start populist ventures to demonstrate general society they are working. This could emerge on account of friends delegated by the governors to champion their own particular advantages eventually these wellbeing ventures neglect to address the reason for their foundation for neglecting to line up with the requirements of the objective group. In this manner there is have to persistently screen the impacts of the undertakings started on the welfare of the county government community.

2.8 Conceptual Framework

The conceptual framework presents a schematic interpretation of the relationship between the dependent and independent variables which is provison of healthcare on services delivery in the devolved system of government.

Independent Variable **Dependent Variable**



Source: Author 2017, Researcher

In the conceptual framework the hospitals, dispensaries, theatres and medical labs and the number of hospital bed per unit are the indicators of health facilities and their presence and location interms of distance and the population they serve affect the delivery of the healthcare services.The availability and high number of nurses, doctors and clinical officers per patient is an indicates services availability to the patients, use of Ict in management and supervision of the doctors and nurses by the management in charge ensures accountability and indicates elements of good management, training of the medics increases the skill capacity. How strike are handled also indicate type of management. In the procurement of medical equipment availability of an inspection body for counterfeits ensures that the delivered drugs and equipment are of quality, a transparent procurement system with a digitised record keeping eliminates conduits for corruption in procurement. The stakeholders involved in procurement should have background knowledge in that area.

2.9 Summary of Literature Review

This chapter presented and analysed some literature and studies locally and internationally that are relevant to the objectives of the research title, it started by analysing those that are relevant to objective one which is location of health facilities, then objective two which was medical staffing, objective three was management and finally objective four was supply of medical equipment. It came out that many countries particularly developing countries still struggle in their attempt to achieve a well functioning healthcare provision system like the developed nations. Issues such as bad infrastructure, poor management and poor staffing were a major hinderance to them, they are also dogged by political power games and lack of goodwill from the government to fully devolve the authority and resources to the regions, corruption and favouritism in appointments is also a major setback in their quest to achieve a good healthcare system. This points out to the fact that more studies need to be carried out on how to address these challenges. This chapter also looks at theories that have a bearing to the research title. It ends with a conceptual framework depicting how the variables are interrelated and the indicators that define them.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter gives information on the how the research will be executed, how respondents will be approached, as well as when, where and how the research will be conducted. The following are the specific subsections which includes; research design, target population, sample design, validity and reliability of instruments, pilot testing, data collection methods and procedures and data analysis techniques. It also talks about ethical issues in data collection.

3.2 Research Design

The study utilised a descriptive survey research design technique in trying to understand the factors affecting provision of health services. The design involved a mixed method through use of qualitative and quantitative data in a single study. The design was chosen since it enabled use of questionnaires, interviews schedule, direct observation and documents analysis which are the instruments that considered appropriate to collecting data in this research.

3.3 Target Population

Target population is defined as total individuals, elements or groups to be studied (Orodho, 2009), the people targeted in this research were the medical staff in the various medical centres and the patients in those centres in kisumu east subcounty. The sub-county has approximately twenty two health facilities which are; ten dispensaries, five health centres, five sub-county hospitals, one county hospitals and one referral hospital (MoH,2017).Since the number is considered manageable all the units were selected for study and no sample was taken. The health facilities were first stratified; the strata consisted of dispensary, health centre, sub-county, county and referral hospitals. From the dispensary stratum in each dispensary three people were selected for the study one clinical officer, one nurse and one patient. From the Health centre stratum four people were selected for the study one nurse, one clinical officer, one doctor and one patient. From the sub-county stratum four people were selected for the study one nurse, one clinical officer, one doctor and one patient. From the county stratum ten people were selected for the study two nurses, three clinical officers, two doctors and three patients. From the referral stratum ten respondents were selected for the study which were two nurses, three clinical officers, two doctors and three patients.

3.4 Data Collection Instruments

The sources of data for this study were both primary data and secondary data Primary data was collected using questionnaire which were administered by the researcher with the help of research assistants. The questionnaires comprised of questions which sought to answer questions related to the objectives of this study. The questions were both closed ended to enhance uniformity and save on time by selecting through ticking option and open ended to ensure maximum data is obtained with some slight explanation. The questionnaires were administered through 'drop and pick later method' Interview schedule was also used to collect data from respondents who were mainly health officials such as nurses, clinical officers, doctors and county health director. The interview however was guided by a structured interview guide, direct observation was also done and noted keenly. The secondary data was collected from county health offices journals, conference reports and other publications in Libraries and internet this was information on medical staffing, staff workshops and trainings, medical equipment procurement and inventories.

3.4.1 Pilot Testing of Instruments

Trial testing of the measuring instruments was undertaken using a few subjects whose characteristics are similar to those in the target population for study to ascertain the feasibility of the study. The pilot study for this research project was conducted in kisumu west subcounty where a maximum of nine respondents were selected for the study namely one patient, one clinical officer and one nurse in each of two medical centres selected namely two dispensaries and one subcounty hospital.

3.4.2 Validity of Instruments

According to Mugenda (2003), research instruments need to be valid and reliable in order to produce useful results. Validity of research instruments is achieved when they measure what they are intended for and does so clearly without accidentally including other factors. The validity of the research instruments was measured through the opinion of experts such as supervisor. A pilot study was undertaken to determine their suitability. Any ambiguity or non clarity in the questionnaire item was cleared before the questionnaire was taken to the field for data collection.

3.4.3 Reliability of Instruments

Reliability is achieved when research instrument has internal consistency. A pilot study was done to assess the capability of the research instruments to collect required data for the research. The questionnaires and interview guide were first administered to a total of nine respondents, three

respondents in each of the three medical centres in the pilot study. The pilot test was meant to establish whether all the questions from the questionnaire was fully understood by the targeted respondents and hence rectification if need be. The pilot study took place before the actual research was carried out, a test retest was done and it came out the respondents understood almost all the questions leading to consistency in results.

3.5 Data collection Procedure

The data collection instruments was first approved by the supervisor and the department before a letter and a permit that allows for the collection of data was issued by the school, which was later approved by the relevant authority and the county office. This allowed for the collection of data from the government health offices. The questionnaires were taken personally to the respondents and in some instance with the help of the person in charge. The purpose of personally administering questionnaires to respondents was to establish rapport with the respondents while introducing the research, providing clarifications sought by the respondents on the spot and collecting the questionnaire immediately after they are completed. Short interviews were also conducted on the respondents by use of a structured questionnaire.

3.6 Data Analysis is Techniques

In this research project questionnaires were adequately checked for credibility andverification. The data was analyzed by descriptive statistics analysis technique, and content analysis technique. The data was coded and tabulated on frequency distribution tables. The summarized data was analyzed using percentages and frequencies and presented using tables mean, median mode and standard deviations were also analysed with Statistical software SPSS. Qualitative data analysis involved explanation of information obtained from the empirical literature. Quantitative analysis involved use of numeric measures to the scores of various responses obtained from the questionnaire. The output of data analysis generated was presented in tables. Interpretation and discussion of data was made based on research objectives, conclusions and recommendations were thereafter made.

3.7 Ethical Considerations

The information obtained from this study would be used only for the fulfilment of the researcher's academic requirement. The information would not be divulged to any third parties at any cost, during the study it was possible to come across other important government information and the data was kept confidential. The researcher restricted himself to whatever data relevant to the study

only. Efforts were done to meet all necessary compliance requirements in accessing any government facility and sites.

3.8 Operationalization of Variables

VARIABLE	INDICATORS	MEASUREMENT	SCALE OF MEASUREMENT
provision of healthcare services	-faster access to health services, -well equipped hospital, labs, theatre hospitals - high living health standards - clean Environment -proper mgmt few strikes, ICT use - availability of doctors, low death rates	Dimension of success	Nominal and ordinal
Location	-distance location -Travel time, -travelling means -accessibility	Success dimension	Nominal and ordinal
Medical Staffing	- availability of doctors, nurse, the number ratio of nurses/doctors to patient per unit -proper working conditions, staff houses	Dimension of success	-Nominal and Ordinal
Management	-Proper communiation channels,ICT -training -good deployment environ - Few strikes,	Success dimensions	-Ordinal and nominal
Medical Equipment	-rules guiding procurement -Timely supply, -qualified stakeholders -inspecting body for counterfeits	Sucesss dimension	Nominal and ordinal

CHAPTER FOUR

DATA ANALYSIS, PRESENTATION, INTERPRETATION AND DISCUSSION

4.1. Introduction

This chapter presents data analysis, presentation, interpretation and analysis of findings on the primary and secondary data collected on the objective of the study which was to explore the factors influencing provision of healthcare services in the devolved system of government in kisumu county with regard to location of healthcare facilities, medical staffing, management, and medical equipment procurement.

4.2 Response Rate

The study targeted a total of ninety respondents in twenty two medical centres in the sub-county. Out of the ninety questionnaires iand interview guide issued, sixty eight were returned giving a response rate of seventy five percent. According to Mugenda and Mugenda (2003) a 50% response rate is adaequate, 60% good and 70% is rated very good. This implies that the response rate in the study was very good. This information is shown in table 4.1

Table 4.1 Response rate

Response rate	Frequency	Percentage
Returned	68	75.55%
Not returned	22	24.45%
Total	90	100%

Source: Research data

4.3 Demographic Information

The study found it important to establish the demographic information of the respondents, the respondents demographic information includes age, gender and education level

4.3.1 Age of Respondents

The age of the respondents was determined by the researcher, it was important in knowing whether the population of the area consisted of children who were dependent on the adults or were of youthful age and whether they were productive people in the society. The outcome of this study came out as shown in the table 4.2

Table 4.2 showing Age of respondents

	Frequency	Percentage
Above 40 years	1	1.5%
18-21 years	2	2.9%
22-25 years	7	10.3%
36-40 years	15	22.1%
26-30 years	18	26.5%
31-35 years	25	36.8%
Total	68	100%

Source: Research Data

From the analysis of the data in table 4.2 it was realised that the majority of the respondents were within the age bracket of 31-35 years followed by those within the age bracket of 26-30 years

4.3.2 Gender of the Respondents

The researcher deemed it fit to also analyse the gender of the respondents involved in the research work the data has been summarised in the table 4.3

Table 4.3 Gender of the Respondents

	Frequency	percentage
Male patients	12	17.6%
Female patients	14	20.6%
Female nurse	14	20.6%
Male nurse	6	8.8%
Male clinical officer	7	10.3%
Female clinical officer	8	11.6%
Male doctor	5	7.4%
Female doctor	2	2.9%
Total	68	100%

Source: Research Data

From the analysis of the data in table 4.3 most of the respondents were female both the patients and the medical practitioners this was attributed to the fact that female make up the majority of the population of the country and they are also thought of as willing to seek medical services compared to the male counterparts. The male dominated only in the doctors category.

4.3.3 Education level

The education level of the respondents was also obtained by the researcher, the information is summarised in table 4.4

Table 4.4 Education level

	Frequency	**percentage**
Secondary	14	20.6%
University	16	23.5%
College	38	55.9%
Total	68	100%

Source: Research Data

From the analysis of the data in table 4.4 it came out that most of the respondents had either attained a college education or gone beyond, this was of great significance to the research in that they understood the questions well with minimal effort required in clarification.

4.4 Location of Health Facilities and Provision of Healthcare Services

Provision of healthcare services due to location of the center is affected by issues such as distance, travelling cost and travelling means and time.

4.4.1 Distance

Distance is an important factor influencing the provision of healthcare services, many people have often failed to get the services due to the medical centre being located far away. this has been observed in many parts of Kenya especially those located in the remote areas lacking proper infrastructure such as roads and in some instances residents of these areas have cited insecurity as an issue hampering their desire to seek healthcare services in these regions. The government and many Ngo's have tried to bridge this gap through the introduction of mobile clinics to enhance delivery of healthcare in these regions but the lapseis still eminent in the delivery of healthcare services in these regions. The researcher sought to establish how long the patients

travel in their quest for medical services. Table 4.5 shows the distance location of the health nearest facilities.

Table 4.5 Distance location

	Frequency	percentage
1 kilometer	27	39.7%
2 kilometer	14	20.6%
3 kilometer	8	11.8%
Half a kilometer	5	7.4%
Less than a kilometer	14	20.6%
Total	68	100%

Source: Research Findings

From the analysis of the data in table 4.5 the mean distance travelled by most of the people for medical services was 2 kilometres; this was in line with the government's aspiration that no one should travel for more than two kilometres seeking healthcare services.

4.4.2 Travelling Means

The means used to access the medical services was also deemed important by the researcher Table 4.6 shows means of travelling to the medical centres

Table 4.6 Travelling Means

	Frequency	percentage
Public	66	90.9%
Private	6	9.1%
Total	68	100%

Source: Research Data

Analysis of data in table 4.6 show most of the people preferred public means of getting to the healthcare centers and most people used public vehicles and only hired in case of emergency Ambulances was lacking in most cases. only 9% used private means.

4.4.3 Travelling Time

The time taken to get to the medical center was also deemed of great importance, a part from the means the nature of road surface affects the time taken. Table 4.7 shows the travelling time to the health centers, this is of great importance in terms of handling critical conditions on time

Table 4.7 Time Taken to Get to the Hospital

	Frequency	percentage
5-10 min	29	42.6%
20-30 mins	35	51.5%
More than 30 mins	4	5.9%
Total	68	100%

Source:Research Findings

Table 4.7shows that averagely most people took 20-30 minutes to get to the medical centres this was viewed as good unless it was an emergency case, this is in line with government aspirations in KHSSP that the time taken to get to the nearest medical facility should be averagely 30 mins.

The researcher sought to find out the respondents opinions on their feeling on what affects their desire to seek medical attention with regard to travelling cost, medical attention, facilities, travelling means and social issues, this was measured on a likert scale of; 0-disagree; (D) 1-slightly agree (SLA); 2-agree (A),3-strongly agree, (SA), 4-very strongly agree; (VSA)

Table 4.8 summarises the information

Table 4.8 Opinion on Cost, Means, Transport, Facilities and Social Issues

	D	SLA	A	SA	VSA	Mean	Median	Total
Travelling means	6	9	22	24	7	2.25	2.00	68
Medical attention	1	6	6	20	22	3.02	3.00	68
Transport cost	14	18	6	4	13	1.71	1.00	68
Social issues	8	14	8	28	4	2.97	4.00	68
Facilities present	12	11	24	21	0	2.62	3.00	68

Source: Research Data

Analysis of the data in table 4.8 shows that with a mean of 3.02 the type of medical attention mostly influenced people's desire to visit the medical centre followed by the social issues, facilities in the centre then travelling means and cost.

The researcher also sought to determine if there was a relationship between missing medical treatment and the type of medical attention; eg routine check-ups, cancer screening, emergencies, diabetes and heart attack on the scale below of (0-never missed, 1-3 slightly miss, 3 missed)

Table 4.9 Misses On Check-Ups, Diabetes, Screening, Emergency

	Check ups	Screening	Emergency	Diabetes
None	15	15	15	10
1-3 times	5	3	2	2
Total	20	18	17	12
Mean	.25	.17	.12	.09
Median	.00	.00	.00	.00

Source: Research findings

From the analysis of the data in table 4.9 most people with the above conditions were unlikely to miss the medical attention at a mean of below zero, it is therefore apparent that condition type played a key role in seeking healthcare services.

4.5 Medical Staffing and Provision of Healthcare Services

The researcher sought to determine how medical staffing affected provision of medical services by looking at the waiting time for the services, number of stuff per unit and the patient ratio.

4.5.1 Waiting time

The research sought to establish how often someone has to wait for medical services with regard to medical conditions of emergency, routine check-ups, chest pains and dialysis, this would be helpful in determining whether there was sufficient number of medical personnel such as doctors, nurses and clinical officers. The waiting time was measured on a scale of 0-immediately, 1-one hour, 2- hours or more as shown in table 4.10

Table 4.10 Average Waiting Time

	Emergency Accidents	chest pains	Regular checkups	screening
Immediately	21	11	4	0
one hour	2	14	10	4
more hours	0	1	3	10
Mean	.09	.65	1.33	2.00
Median	.00	1.00	1.00	2. 00
Std. Deviation	.288	.689	1.017	.52

Source; Research Data

Analysis of the data in table 4.10 showed that emergency cases were handled immediately with a mean of 0.09, followed by chest pain 0.65 and finally routine check ups and then screening, the waiting time for emergencies was considered good and inline with the service charter hawover the situation ought to be hastened in case of chest pains as it can lead to death of patients with serious conditions such as hypertension.

4.5.2 Number of Medical Personnel

The number of personnel involved in healthcare provision was important in establishing whether the complains of insufficient number of medical staff was justified. The researcher therefore sought to establish the number of the medical personnel namely nurses, doctors and clinical officers involved in healthcare delivery in the respective hospitals. Many health centers especially the government facilities are known to receive a high number of patients on a daily basis a problem that rises from the inadequate number of health facilities in many regions and the high amount of fee charged by the private health institution, the problem of healthcare services provision is further compounded by the inadequate number of healthcare services provider such as nurses, clinical officers and doctors. Many feel dejected and overworked in the government facilities and with low pay a significant number have opted to work in private institution with better working conditions and pay, over many years medical services providers have migrated to other countries such as Botswana South Africa and United kingdom with better working conditions for the healthcare provision.

Table 4.11 Average Number of Medical Practitioners From level 1 to level 5 Hospitals

	Frequency	Percentage
Dispensary (level 1)		
Nurse	34	73.9%
Clinical officer	12	26.1%
Total		
Healthcentre (level 2)		
Nurse	28	63.6%
Clinical officer	16	36.2%
Doctor		
Subcounty (level 3)		
Nurse	48	60%
Clinical officer	28	35%
Doctor	4	5%
County (level 4)		
Nurse	80	73.4%
Clinical officer	20	18.3%
Doctor	9	8.3%
Referral (Level 5)		
Nurse	150	80.6%
Clinical officer	21	11.3%
Doctor	15	8.1%

	Level 1	**level 2**	**level 3**	**level 4**	**level 5**
Mean	1.52	1.38	1.75	1.45	1.31
Median	1.00	1.00	1.00	1.00	1.00
Std.deviation	.888	.80	.967	.787	.664
Variance	.788	.648	.934	.620	.441

Source:Research data

Analysis of the statistics in tables 4.11 show that the dispensary which is level 1 mainly on average had the nurses as the majority followed by the clinical officers, this was also due to the fact that there were more dispensaries than other level of hospitals this was deemed fair since this is what the government recommends for this level of hospital based on the services they offer of primary healthcare and non-inpatient services. At level 2 which is health centre the number and ratio of nurses to clinical officers dropped significantly but unfortunately the doctors lacked in these facilities which was against the recommendation of the ministry of health. At the subcounty level the number of nurses and clinical officers increased with an average of one doctor per medical institution, according to the ministry this was a low ratio of doctors to patient considering

some centers received over three hundred patients. At the county level the number of doctors increased to around ten the number of nurses was around 80 and clinical officers were 20. The number of patients also increased significantly compromising the same services, this was also witnessed in the referral hospital with a doctor figure of around fifteen to twenty, consultant doctors were found here but the ratio of doctors to patient was still very low compared to WHO recommendation of one doctor to eight hundred patient ratio and one nurse to three hundred patient ratio.

In many instances healthcare services provision have often stalled due to unavailability of drugs and medical equipment in those health institutions medical personnel have in some instances gone on strike due to lack of the equipment to enable them provide healthcare services. Medical personnel have often claimed that the government has ignored the recruitment of more health professionals leading to them being overworked. Many have often linked these woes to economic issues bedeviling the health sector with some claiming it pure malice and politics affecting the delivery of the healthcare equipment to the hospitals and solution of the medics grievances in time some claim its cultural in nature and it's the cultural issues that need to be dealt with, the public health sector has had its fair complains with many claiming devolution of health has not adequately addressed the woes judging by the increased deterioration of sanitary conditions due poor collection of garbage and careless dumping of waste in residential and non-residential areas. many people have often claimed corruption have played a major part in the efforts to ensure the sanitary conditions are many with some alleging that the public health officers are compromised with bribes to ignore illegal dumping and issue permits to institutions who do not meet the level of sanitary requirement. The use of ICT in health centers is also of great importance particularly in the areas security and registration of patients ensuring the patients' health records are well secured and are well managed, many health institutions hawover are still using the manual file system. Use of CCTV for surveillance is of also great significance unfortunately many health centers are known to lack these gadgets.

The researcher therefore set out to get the respondents opinions on the issues of medical personnel, amount of drugs, management, social-cultural issues, economic issues, politics in healthcare devolution, public health and ICT use affecting medical services provision in the subcounty this was measured on a likert scale of; 0-disagree; (D) 1-slightly agree (SLA); 2-agree (A),3-strongly agree, (SA), 4-very strongly agree; (VSA)

Table 4.12 Statistics on Number of Medics, Drugs, Management, Social Culture on Economic, Politics, Public Health and ICT Use

Statement	D	SLA	A	SA	VSA	Mean	Std.deviation
We have enough doctors,nurse,clinician	17	31	4	3	1	.93	.871
We have enough drugs	27	15	6	3	1	.77	1.002
Management is better in devolution	22	17	9	4	0	.90	.955
Social cultural issue affect healthcare seeking	14	8	10	13	7	1.83	1.424
Economic issues affect healthcare service provision	6	4	13	12	18	2.60	1.335
Politicts affect provision of healthcare service	3	8	9	12	13	2.53	1.272
Public health is better with devolution	26	12	4	4	6	1.08	1.398
ICT has been adaequately used	27	13	6	4	1	.80	1.059

Source: Research Data

Analysis of the data in tables 4.12. showed that most people believed the number of medical practioners was greately insufficient with a score of 0.93. This was attributed to low nurses/doctors to patient ratio and long waiting hours in the queues. most people believed economic issues affect the provision of healthcare to a greatest level at 2.60 followed by politics at 2.53, social cultural issues was third at 1.83,at 1.08 many people disagreed that public health was better under the devolution government with many citing incidences of negligence in collection of garbage and ensuring cleanliness of facilities. At 0.77 many strongly believed we did not have enough drugs in the medical centre, at 0.90 many did not agree that devolution made management better with many people citing increased incidences of strike by nurse and doctor, at 0.80 many believed ICT was not sufficiently used in the medical centres. The digitisation of the patient

records in the computers was not adequately implemented and many medical centres lacked these electronic devices. Very few centre had computers in the registry and use of CCTV for security was spotted in very few medical centres, ICT was also used in reception and cash office to track income verses expenditure and trace commodities given to hospital. The deployment of the doctors to their work station is handled by the county director for health noting that the county has got less number of doctors compared to the internationally acceptable standards. In terms of specialisation of doctors there is no policy with the feeling being the government should sponsor the medical students in those area so that they have got refined skills in those area.

4.6 How Management Influence Provision of Healthcare Services

Management is an important aspect in the provision of healthcare services its only through proper management that healthcare services will be delivered to the patients. The researcher sought to determine how managerial issues of communication, supervision, training and use of ICT affected provision of medical service, motivational issues such as pay increase, staff houses construction and improving of working conditions were also looked into.

4.6.1 Communication Channel, Supervision, Houses, Timely Problem solving, Facilities and Medical Trainings and Seminar

Proper communication channel is paramount in the running of the day to day services of any institution, a good communication protocol is thus paramount in an organization in conveying information to ensure that an organization is on course to achieving its objectives and vision Improper channel of communication has often been cited as a major issue that has led to cases of strike that could have been avoided, lack of supervision has also often been cited as a major issue contributing to lack of services in the medical centers with many claiming the medical stuff spend most of their times in their private clinics at the expense of the government facilities they have been assigned. The medics have often talked of poor working conditions and lack of protective gadgets such as medical gloves leading them to strike to find the solution. Its against this backdrop that the researcher sought the respondents' opinion on the issues of proper communication channel, construction of staff houses as a motivational factor, handling staff grievances on time, supervision, increasing number of facilities and workshop trainings and seminars. Their opinions were measured on a scale of a linkert scale of: 0-disagree; (D) 1-slightly agree (SLA); 2-agree (A),3-strongly agree, (SA), 4-very strongly agree; (VSA)

Table 4.13 Opinion of the Respondents on Communication, Staff Houses Construction, Timely Problem Solving Supervision, Facilities and Seminars

	D	SLA	A	SA	VSA	Mean	Std.deviation
Proper comm. Channel	1	5	2	19	0	3.44	0.934
Staff houses construction	1	2	6	7	10	2.88	1.143
Solving issues on time	1	1	2	4	19	3.44	1.050
Supervision	3	8	9	9	0	2.83	1.002
Increasing no. of facilities	2	3	8	8	5	2.92	1.623
Seminars and workshop trainings	1	2	4	20	0	3.59	0.797

Source: Research data

As shown in table 4.13 at an indicative figure of 3.59 Most of the respondents strongly believed seminars and trainings was a critical factor in management in enhancing the skills and knowledge of the medics to offer better services to the public, this was followed closely by having a proper channel of communication at 3.44 and also timely solving of the problems to avert strike at 3.44.this was followed by increasing the number of facilities at 2.92, construction of staff houses as a motivational factor and finally supervision. Most of the grievances were handled through suggestion boxes and dialogue of the affected by the bosses with supervision done by immediate boss and assessment done by administration after every three months, training was done by government and experts/donor sponsors whenever the felt it was necessary. The doctors felt that they needed government support for further studies in specialisation areas such as urology as agreed in their collective bargaining agreement.

4.6.2 Poor Management, Corruption, Lack of Funds, Unqualified Staff, Poor Pay and Facilities

In many instances corruption due to poor management especially in procurement of medical equipment has often been cited as a major issue hampering the provision of healthcare services this has in many instances led to unavailability of funds to run operations in the medical centres

and employment of unqualified persons in the health centres. The researcher further sought the respondents opinions on the extent they the issues of poor management, corruption lack of funds, unqualified medical staff poor pay and inadequate facilities/equipment affected proper healthcare provision, this was measured on a likert scale of: 0-disagree; (D) 1-slightly agree (SLA); 2-agree (A),3-strongly agree, (SA), 4-very strongly agree; (VSA)

Table 4.14 Opinion on Poor Management, Corruption, Lack of Funds Unqualified Staff, Poor Pay and Facilities

	D	SLA	A	SA	VSA	Mean	Std.deviation
Poor management	1	1	1	6	17	3.42	1.027
corruption	0	1	0	9	16	3.54	.706
Lack of funds	1	1	2	4	19	3.56	0.892
Unqualified stuff	4	3	3	17	27	3.07	1.466
Poor pay	0	4	0	5	16	3.32	1.108
Inadequate facilities	0	0	8	17	0	3.68	0.476

Research Data

As shown in tables 4.14 and At 3.68 most people strongly believed inadequate facilities was a major factor that hampered provision of healthcare services, lack of funds at 3.56 was also seen as a strong factor hindering provision of healthcare services with many medics saying they were unable to undertake key decisions such as campaigns and paying of community health workers who help in the provision of the services. This was followed by corruption at 3.54 in the medical centers and poor management at 3.42, poor pay also cited at 3.32 and finally the least people felt the medical staff were unqualified in the undertaking of their duties, in cases of grievances from patient those involved were reported by their supervisors to the authority then summoned by the management then investigation was done and the appropriate remedy taken according to the policies put in place and the dictates in the service charter of the health institution.

4.7 Procurement of Medical Equipment and Provision of Health

Procurement of medical equipment is of great significance in the provision of healthcare services because its through them that the services provision is realised.

4.7.1 Corruption, Unqualified Stakeholders, Poor Policies, Counterfeits, Cost, Equipment

The researcher sought the respondents opinion on the extent they felt the issues of corruption, stakeholders, poor policies, counterfeits and substandard, lack of equipment and transport cost affected healthcare services provision this was measured on the linker scale of: 0-does not agree, 1-slightly agree,2-agree, 3-strongly agree,4-very strongly agree

Table 4.15 Respondents Opinion on Corruption, Unqualified Stakeholders, Poor Policies, Counterfeits, Cost, Equipment

	D	SLA	A	SA	VSA	Mean	Std. deviation
Corruption in procurement	3	0	3	6	16	3.25	1.041
Unqualified stakeholders	0	6	2	8	8	2.75	1.189
Poor procurement policies	1	2	2	6	13	3.17	1.167
Substandards and counterfeits	2	2	2	5	16	3.15	1.292
Lack of equipment	1	3	2	7	13	3.08	1.197
Transport cost	3	8	2	4	9	2.31	1.517

Source: Research Data

As shown in table 4.15 at an indicative figure of 3.25 many strongly felt corruption was the biggest problem in procurement of medical equipment and provision of healthcare services this was followed by poor procurement policies at 3.17, counterfeit medical equipment and drugs was of an indicative figure of 3.15, lack of equipment at 3.08,unqualified stakeholders and finally transport cost.

4.7.2 Lab, X-Ray, Ambulance, Dialysis, Cancer Screening and Inpatient Services

The researcher further set out to establish whether the various medical centers had the facilities of Lab, x-ray, ambulance, dialysis, cancer screening and inpatient.

Table 4.16 Statistics on Lab, X-ray, Ambulance, Dialysis, Cancer Screening and Inpatient Service

	Lab services	x-ray services	Ambulance services	Cancer screening	Dialysis	Inpatient
Dispensary	10			10		
Healthcentre	5	2	2	5		5
Subcounty	5	4	4	3		3
County	1	6	7	1	2	2
Referral	1	8	8	1	1	1

Source:Researchdata

As shown in table 4.16 It was noted that medical lab services was present in all the medical facilities, the ambulance services were only present from health centre level and very few had them mainly those owned by private entities, subcounty hospitals had ambulances courtesy of CDF. County hospitals to referral also had ambulances, hawover x-ray services were only present in the subcounty level upwards, cancer screening services were noted from the dispensaries level. In patient services were noted from the healthcentre level to the referral.dialysis was hawover only present in the referral hospital this was attributed to the costly nature of the procurement of the dialysis machine involved in the service

Procurement activity is protected by the public procurement act law with the stakeholders involved in the procurement process being the national government through ministry of health, the county government, Kenya beareu of standards.As noted before the agency responsible for supply of the drugs and medical equipment is KEMSA with MEDs mainly supplying NGOs, the procurement of goods has been automated through LMIS system enabling faster ordering and supply medical equipment hawover most medical centres are yet to fully adopt this technology with the ordering still done manually. In procurement the pharmaceutical supplier has to meet the standards of the pharmacy and poisons board before its allowed to carry out the supply activity. The process usually involve conducting analysis of the required equipment, checking quality in the market then placing order to KEMSA, after delivery and use post consumption analysis is

usually conducted, hawover government needs to remove taxes on medical equipment and drugs to enable affordability, there is a great feeling that health should be taken back to the national government due to many logistic challenges under devolution. Cases of drugs counterfeits are usually handled by the chemist and poisons board with incidences of substandard equipment handled by Kenya medical association and Kenya beareu of standards. In the event of unavailability of drugs which is usually a rare case patients are referred to private facilities or referral hospitals.

CHAPTER FIVE
SUMMARY CONCLUSION AND RECOMMENDATION

5.1 Introduction

This chapter presents a summary of the findings conclusion and recommendations based on the analysis of the findings on the objectives of the research which were how location of health facilities influence provision of health care services, how medical staffing influence provision of healthcare services, how management influence provision of healthcare services and how procurement of medical equipment influence provision of healthcare services.

5.2 Summary

While Kenya devolved its healthcare services to the county in line with the 2010 constitution various challenges emerged that crippled the provision of healthcare services mainly due to poor management. Logistical issues of location of the healthcare facilities, medical staffing, management and medical equipment procurement were keenly analyzed.

5.2.1 Location of healthcare Facilities and Provision of Healthcare Services

From the research findings it was clear that most people in this area travelled an average distance of two kilometres to access the medical services, this was deemed good according to the government aspiration that nobody should travel more than two kilometres seeking healthcare services. The most preferred means was public transport with average time of twenty to thirty minutes though private means was a faster means, most people used bicycle in private travel unless it was an emergency with very few owning cars. This was partly attributed to lack of ambulances in most of health facilities this was found to be in line with the findings of a study in North Carolina (Arcury,2005). It was also noted that people with medical conditions such as diabetes or cases of emergencies were more likely to visit the medical centres regardless of the distance.

5.2.2 Medical Staffing and Provision of Healthcare Services

The ratio of medical staff to that of patient was keenly analysed and noted to be immeansly low compared to the WHO required standards, this was mainly witnessed in the subcounty hospitals where most had only one doctor while the centre received over three hundred patients per day. The waiting time for medical attention was noted to be long unless it was a case of emergency, this was mainly attributed to few medical staff in those centres the ratio of nurses to patient was around 1: 1200 way below the WHO recommendation of 1:300 likewise the ratio of doctors to

patient was incredibly low. Inadequate medical facilities was also witnesses, this mirrors (WHO,2014) study findings in Africa. Many medical practitioners felt economic issues mostly affected health services provision compared to political issues a significant number felt employing more nurses and improving working conditions would better the provison of healthcare service.

5.2.3 Management and Provision of Healthcare Services

Most people believed that management issues affected provision of healthcare services to the greatest degree, there was immense feeling that since devolution many management issues have emerged and crippled the provision of healthcare services. Most people believe the county government is unable to handle devolution of health and that the decision should be reversed. Most people strongly believed inadaequate funding and lack of facilities are a key issue affecting management, corruption and poor pay were also cited as factors that strongly and negativley affected provision of healthcare services this was found to be inline with (worldbank, 2001e) study in Ghana and Africa. seminars and trainings were seen as a critical solutions that impact skills to the medics and is the most important management solution followed by having a proper channel of communication followed by timely solution of problems, supervision and construction of staff houses as a motivational factor followed closely.

5.2.4 Procurement of Medical Equipment and Provision of Healthcare Service

In the procurement of medical equipment corruption was a key factor affecting the provision of healthcare services in terms of acquisition of the necessary equipment many people believed it strongly affected the process, this was followed by weak procurement policies, substandard equipment and unqualified staff, facilities and transport issues. This mirrors the findings of a research study in Argentina and Colombia (Savedoff, 2001).

5.3 Conclusion

Distance and location of healthcare facilities play a crucial factor in the provision of healthcare services affecting both the medical practitioners and the patient, kisumu east subcounty has a relatively even distribution of medical facilities making these services available within a two kilometre radius, this crucial in realisation of the KHSSP plan of universal healthcare to all. The low ratio of medical practitioners to that of patient is a great hindrance to faster and timely access of medical service can lead to death in cases of emergencies, the ratio of doctors to patient is particularly wanting. A proper hiring framework is particularly lacking in the devolved government. Management in the health sector is wanting under the devolved government leading

to demotivation of workers in delayed payment and addressing of grievances, there is a feeling that county government lacks capacity properly manage healthcare. Procurement of drugs and medical equipment is greatly hampered by corruption courtesy of poor procurement policies and delivery of substandard equipment, these eventually affect the provision of healthcare services.

5.4 Recommendations

Based on the outcome of the research and the findings the researcher recommends the following to the ministry of health; The level 2 hospitals should acquire ambulances to facilitate the movement patients with to the hospital to avert serious crises, the roads in these areas should be pavedThe county should hire more nurses and doctor to facilitate timely provision of healthcare service and reduce the waiting time, also a clear hiring policy should be adopted to avoid favouritism.The devolution of healthcare ought to have been rolled out in phases to give the county officials time to gain skills to manage healthcare service provision. The workers grievances should be well addressed on time to avoid crises.The stakeholders in the procurement department should be vetted to establish their suitability for the job before they are hired, those involved in vices should be prosecuted to enhance accountability.The county government should allocate more funds to the health sector and cut many unnecessary allowances.

5.5 Suggestions For Further Studies

The researcher suggests the following areas for further study based on the outcome of the research work;

1. A Research on influence of devolution on provision of healthcare should be carried out to establish how devolution affects healthcare services provision.
2. A study on management of healthcare services should be carried out to ascertain the proper way of managing healthcare service to avoid health crisis.

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APPENDIX 1

Questionnaire

Introduction

Dear Respondent

This questionnaire is aimed at gathering primary data on the factors influencing healthcare services provision in kisumu East sub-county. You are kindly requested to fill in the questions depending on the instructions given. The information you provide will be treated with utmost confidentiality and will be used for the purpose of accomplishing academic goals. Do not include your name anywhere in the questionnaire. Note that there are no wrong or right answers.

Medical centre and ward name: .....

Section: A Background information

Kindly provide the relevant information by ticking the appropriate box below:

i) Gender
Male ☐ Female ☐

ii) Age bracket

a). 18-21 Years ☐
b). 22-25 Years ☐
c). 26-30 Years ☐
d). 31-35 Years ☐
e). 35-40 Years ☐
f). Above 40 years ☐

iii) Education level:
Primary ☐ Secondary ☐ university ☐

iv) Work type
Manual labour ☐ Self employed ☐ civil servant ☐

v) How long have you been a resident of this place

a) 0-2 yrs ☐
b) 3-5 yrs ☐
c) 6-10 yrs ☐
d) 11-20 yrs and above ☐

vi) Marital status
Single ☐ married ☐

vii) Number of children (if married)
a) 0-3 ☐

b) 4-6 ☐
c) 7 and above ☐

Section: B

Location of facilities

1. Do you have any medical attention that require regular visit to medical centre, if yes kindly indicate the name.....

Ye☐ ☐

2. Have you ever missed medical attention because the hospital is far and you couldn't get to it and if yes how many times

Yes ☐ ..... ☐ No

3. How far is the nearest medical centre from your home and what's the name

.....

4. How long does it take for you to reach the nearest medical centre by:

Public ..... private.....

5.Do you have any disability, if yes name it

Yes ☐ ..... ☐ No

6.Do you have a regular or personal doctor

Yes ☐ No☐

7.How many medical appointments have you made in the last one year and where have they been; provide more information below

Town☐ out of town ☐

.....
.....

8. what is your most preferred means of getting to the medical centre and how many times have you used the various means. provide some more information below

Public ☐ ..... private ☐ .....

.....
.....

9. Have you ever experienced a situation that requires an emergency medical attention and what was your means of getting to the hospital

Private ☐ Ambulance ☐ public ☐

10. Have you ever been referred to another medical centre because of unavailability of facilities or medical equipment, if yes how many times: .....

.....
.....

11.Kindly provide the appropriate information as required and provide more information when necessary**:**

i) Name the type of health facility in the area:

Level		**name**	**number**
Level 2 Dispensary	☐	.....	.....
Level 3 health centre	☐	.....	.....
Level 4 sub county	☐	.....	.....
Level 5 county	☐	.....	.....
Level 6 referral	☐	.....	.....

i i) Do you have access to the following type of health services and what level of hospital are they found:

Service		**level of hospital**
Ambulance	☐	.....
Medical lab	☐	.....
x-ray	☐	.....
screening services cancer/dialysis	☐	.....
mortuary	☐	.....
inpatient services	☐	.....

Medical Staffing

iv) Do you get the health service you want readily while you are in hospital:

Yes ☐ No ☐

v) Do you think the hospital has enough health practioners (doctors/nurses) and other stuff:

Yes ☐ No ☐

vi) Do you feel the practitioners are well versed in their profession and patients respond to treatment:

Yes ☐ No ☐

vii) Do you think the hospital has enough facilities and support services

Yes ☐ No ☐

viii) Are you aware of health campaigns in the area such as polio immunization, H.I.V AIDS awareness and can you name them

Yes ☐ No ☐

SECTION: C

1. To what level do you feel the following issues influence your decision to seek health services with regard to health centre location

Scale

0-does not affect 1- slightly agree 2- affect 3-strongly affect 4-very strongly affect

	0	1	2	3	4
Travelling cost					
Type of medical attention					
Transport means					
Social issues					
Facilities					

2. How many trips have you made to the health centre over the past year for the following

Scale

	0	1-3	4-6	7 -9	10 and more
Routine check ups					
Chronic illness(cancer ,dialysis, heart attack)					
Emergency; accidents					
Diabetes					

3. How many trips to the health centre have you missed over the past year over these conditions

	0	1-3	4-6	7 -9	10 and more
Routine check ups					
Chronic illness(cancer ,dialysis, heart attack)					
Emergency; accidents					

4. how often does someone wait to access these services

	immediately	1 hour	2hr	3-5hr	6hrs and more
Emergency					

Routine checkups					
Chest pains					
Dialysis					
chronic					

5. Indicate your level of agreement or disagreement with these statements

Scale

0-disagree 1- slightly agree 2- agree 3-strongly agree 4-very strongly agree

	0	1	2	3	4
We have enough doctors and nurses					
We have enough drugs and equipment					
Management under devolution is better					
Social/cultural issues affect desire to seek health provision					
Economic isssues affect provision of health services					
Politics interfere with the will to provide better health services					
Public health is better under devolution					
There is adequate use of ict					

5. To what extent do you think these issues affect proper provision of health services

Scale

0-disagree 1- slightly agree 2- agree 3-strongly agree 4-very strongly agree

	0	1	2	3	4
Poor Management					
Corruption					
Lack of medical equipment					
Lack of funds					

6. In your opinion what do you think is the problem with the health sector and what is the solution?

.....
.....
.....
.....
.....
.....
.....

APPENDIX II

Interview guide

This interview guide is aimed at gathering primary data on the factors that influence provision of healthcare services in kisumu East sub -county. It will mainy be used to interview health officials in the subcounty**.**

Section: 1 background information

Position title .....

Gender male ☐ female ☐

Education background

.....

Section: 2 project questions

Do you have access to the following type of health services and what level of hospital are they found:

Service		**level of hospital**
Ambulance	☐	.....
Medical lab	☐	.....
x-ray	☐	.....
screening services cancer/dialysis	☐	.....
mortuary	☐	.....
inpatient services	☐	.....

i. Do you feel we've got enough health facilities in this area.....

ii. What are some of the factors affecting the distribution of these hospitals

.....
.....

.....

Medical Staffing

1. How many of these health officials do we have in the centre

i) Nurses.....

ii) Doctors.....

iii) Clinical officers.....

2. On average how many patients visit this health facility in a day .....

3.how many nurses are attached by per unit in the centre

.....

.....

4. how often does someone wait to access these services

	immediately	1 hour	2hr	3-5hr	6hrs and more
Emergency					
Routine checkups					
Chest pains					
Dialysis					
chronic					

iii. Who are the staff involved in the delivery of these services at the

a) hospital

Doctors nurses, ...

b)Public health

.....

iv. Who is responsible for employment and deployment of the staff to work areas noting that there have been complains of few doctors

.....

.....

v. How do you handle specialisation of doctors;

Dentist/urologist etc .....

vi. How are the health campaigns (eg immunization,H.I.V/AIDS) conducted and who is the organising body

.....

Management

1. what protocol is followed in communicating information to the workers

.....

2. what are the areas that have employed ICT use

.....

3.who handles the deployment of the doctors to the workstation

.....

4. what procedure is followed in addressing workers grievances

.....

5.how is supervision of the workers done

.....

6.Incases of strike how is the issue handled with regard to bringing KDF doctors, practitioners

.....

7.who handles Training in workshops and seminars

.....

9. whats the procedure for handling complains from patients

.....

i) What is the major difference beween the previous management structure and the current one

.....
.....

ii) How and where has ICT been used to enhance service delivery in hospitals e.g digitising records and use of electronic registers

.....
.....

10. To what extent do you agree that doing the following will motivate workers and make provision of services better

Scale

0-does not agree **1- slightly agree** **2- agree** **3-strongly agree** **4-very strongly agree**

	0	1	2	3	4

Proper communication channel					
Constructing Staff houses					
Handling grievance on time					
Supervision					
Increasing number of Facilities					
Workshops and training					

Procurement

iii) What is the agency responsible for supply of;

a) Drugs.....

b) Medical equipment.....

iv) What is the procedure of procuring these drugs and medical equipment

.....
.....

v) Do you think our hospitals are well equipped interms of drugs supply and medical equipment and what more needs to be done

.....

.....

vi) What is the inspecting body for drugs/counterfeits and medical equipment

.....
.....

Section: 3

2.Indicate your level of agreement or disagreement with these statements

Scale

0-disagree 1- slightly agree 2- agree 3-strongly agree 4-very strongly agree

	0	1	2	3	4
We have enough doctors and nurses					
We have enough drugs and equipment					
Management under devolution is better					
Social/cultural issues affect desire to seek health provision					
Economic isssues affect provision of health services					

Politics interfere with the will to provide better health services					
Public health is better under devolution					
There is adequate use of ict					

3. To what extent do you think these issues affect proper provision of health services

Scale

0-disagree 1- slightly agree 2- agree 3-strongly agree 4-very strongly agree

	0	1	2	3	4
Poor Management					
Corruption					
Lack of Funds					
Unqualified medical staff					
Poor pay					
Inadequate Facilities/equipment					

1. Are there written policies that guide in procurement protected by the law

.....

2. What are some of the written rules that guide procurement of medical equipment

.....

3.who are the stakeholders involved in the procurement of medical equipment

.....
.....

3.what is the procedure followed in procurement of medical equipment

.....
.....

4.how is the delivery and distribution of procured equipment handled

.....
.....5.how are issues of counterfeits and generics handled in the procurement of medical equipment

.....
.....

6.How often do you fail to provide medical services because of unavailability of medical equipment

.....

7.how do you handle the situation of unavailability of medical equipment/drugs

.....
.....

8. to what level do you agree the following issues affect procurement of medical equipment

Scale

0-does not affect 1- slightly affect 2- affect 3-strongly affect 4-very strongly affect

	0	1	2	3	4
Corruption in procurement					
Unqualified stakeholders					
Poor policies					
Counterfeits and substandards					
Lack ofequipment					
Transport cost					

9. In your opinion what is ailing the health sector and what is the solution

.....
.....
.....
.....

APPENDIX III

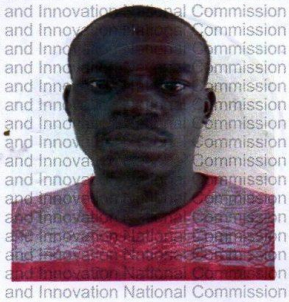
Research Permit

THIS IS TO CERTIFY THAT:
MR. ALOO ZEDEKIAH OJUKI
of UNIVERSITY OF NAIROBI, 289-40222
MAWEGO,OYUGIS,has been permitted to conduct research in *Kisumu County*

on the topic: *FACTORS INFLUENCING PROVISION OF HEALTHCARE SERVICES IN THE DEVOLVED SYSTEM OF GOVERNMENT IN KISUMU EAST SUBCOUNTY KENYA*

for the period ending:
12th September,2018

Permit No : NACOSTI/P/17/11579/18499
Date Of Issue : 12th September,2017
Fee Recieved :Ksh 1000



.....
Applicant's Signature

.....
Director General
National Commission for Science, Technology & Innovation

CONDITIONS

1. **The License is valid for the proposed research, research site specified period.**
2. **Both the Licence and any rights thereunder are non-transferable.**
3. **Upon request of the Commission, the Licensee shall submit a progress report.**
4. **The Licensee shall report to the County Director of Education and County Governor in the area of research before commencement of the research.**
5. **Excavation, filming and collection of specimens are subject to further permissions from relevant Government agencies.**
6. **This Licence does not give authority to transfer research materials.**
7. **The Licensee shall submit two (2) hard copies and upload a soft copy of their final report.**
8. **The Commission reserves the right to modify the conditions of this Licence including its cancellation without prior notice.**

REPUBLIC OF KENYA

National Commission for Science, Technology and Innovation

RESEARCH CLEARANCE PERMIT

Serial No.A 15703

CONDITIONS: see back page

APPENDIX IV

MOH Letter

COUNTY GOVERNMENT OF KISUMU

Telegrams: "Health" Kisumu
Tel: 0792 619977/0786 515431
Email: mohksmeast@yahoo.com

Medical Officer of Health
Kisumu East Sub-County
P. O. Box 486-40100
KISUMU

MINISTRY OF HEALTH

When Replying please quote:
REF.No: ST-GN/13/VOL.2/97

18th July, 2017

The Facility In-charges
KISUMU EAST SUB-COUNTY

RE: ALOO ZEDEKIAH OJUKI – REG.NO:L50/83508/2015

Please permit the bearer of this letter to collect data for his thesis research for a period of 3 months beginning 18th July, 2017 to 18th September, 2017.

The data must not be identifiable data i.e. patient records.

Thank you.

DR. OTIENO K.O., MBchB, MPH, Cert.Hsm
MEDICAL OFFICER OF HEALTH
KISUMU EAST & CENTRAL SUB-COUNTIES

APPENDIX V

County Commissioner

THE PRESIDENCY

MINISTRY OF INTERIOR AND COORDINATION OF NATIONAL GOVERNMENT

Telephone: Kisumu 2022219/Fax: 2022219
Email: ckisumucounty@gmail.com

COUNTY COMMISSIONER
KISUMU COUNTY
P.O. BOX 1912-40100
KISUMU

Ref: CC/KC/EDU/VOL.III/105

Date: 6th November 2017

The Deputy County Commissioner
KISUMU EAST SUB-COUNTY

RESEARCH AUTHORIZATION: ALOO ZEDEKIAH OJUKI

Reference is made to a letter from the National Commission for Science, Technology and Innovation No. NACOSTI/P/17/11579/18499 of 12th September, 2017 on the above underlined subject matter.

The above named is a student of University of Nairobi. He has been authorized to carry out a research on ***"Factors influencing provision of healthcare services in the devolved system of government in Kisumu East Subcounty Kenya"***. The research period ends on 12th September, 2018.

Kindly accord him any assistance that he may need.

P. A. DOLLA, MBS
COUNTY COMMISSIONER
KISUMU COUNTY

Copy to:

University of Nairobi
P O Box 30197-00100
NAIROBI

APPENDIX VI

County Education Letter

MINISTRY OF EDUCATION
State Department of Basic Education

Telegrams:"schooling",Kisumu
Telephone: Kisumu 057 - 2024599
Email:countyeducation.kisumu@gmail.com

When replying please quote

COUNTY DIRECTOR OF EDUCATION
KISUMU COUNTY
PROVINCIAL HEADQUARTERS NYANZA
3RD FLOOR
P.O BOX 575 – 40100
KISUMU

CDE/KSM/GA/19/3A V II/124

3rd November, 2017

TO WHOM IT MAY CONCERN

RE: RESEARCH AUTHORIZATION
ALOO ZEDEKIAH OJUKI –
PERMIT NO.NACOSTI/P/17/11579/18499

The above named is a student at University of Nairobi.

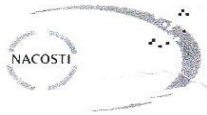
This is to certify that he has been granted authority to carry out research on "***Factors influencing provision of healthcare services in the devolved system of government in Kisumu East Sub County, Kenya,***" for the period ending **12th September, 2018.**

Any assistance accorded to him to accomplish the assignment will be highly appreciated.

EVANS O. MOSE
For: COUNTY DIRECTOR OF EDUCATION
KISUMU COUNTY

APPENDIX VII

County Health Letter



NATIONAL COMMISSION FORSCIENCE, TECHNOLOGY ANDINNOVATION

Telephone:+254-20-2213471,
2241349,3310571,2219420
Fax: +254-20-318245,318249
Email: dg@nacosti.go.ke
Website: www.nacosti.go.ke
When replying please quote

9th Floor, Utalii House
Uhuru Highway
P.O. Box 30623-00100
NAIROBI-KENYA

Ref: No. **NACOSTI/P/17/11579/18499** Date: **12th September, 2017**

Aloo Zedekiah Ojuki
University of Nairobi
P.O. Box 30197-00100
NAIROBI.

Noted
8/11/2017
COUNTY DIRECTOR OF HEALTH KISUMU

RE: RESEARCH AUTHORIZATION

Following your application for authority to carry out research on ***"Factors influencing provision of healthcare services in the devolved system of government in Kisumu East Subcounty Kenya,"*** I am pleased to inform you that you have been authorized to undertake research in **Kisumu County** for the period ending **12th September, 2018.**

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

Kindly note that, as an applicant who has been licensed under the Science, Technology and Innovation Act, 2013 to conduct research in Kenya, you shall deposit **a copy** of the final research report to the Commission within **one year** of completion. The soft copy of the same should be submitted through the Online Research Information System.

GODFREY P. KALERWA MSc., MBA, MKIM
FOR: DIRECTOR-GENERAL/CEO

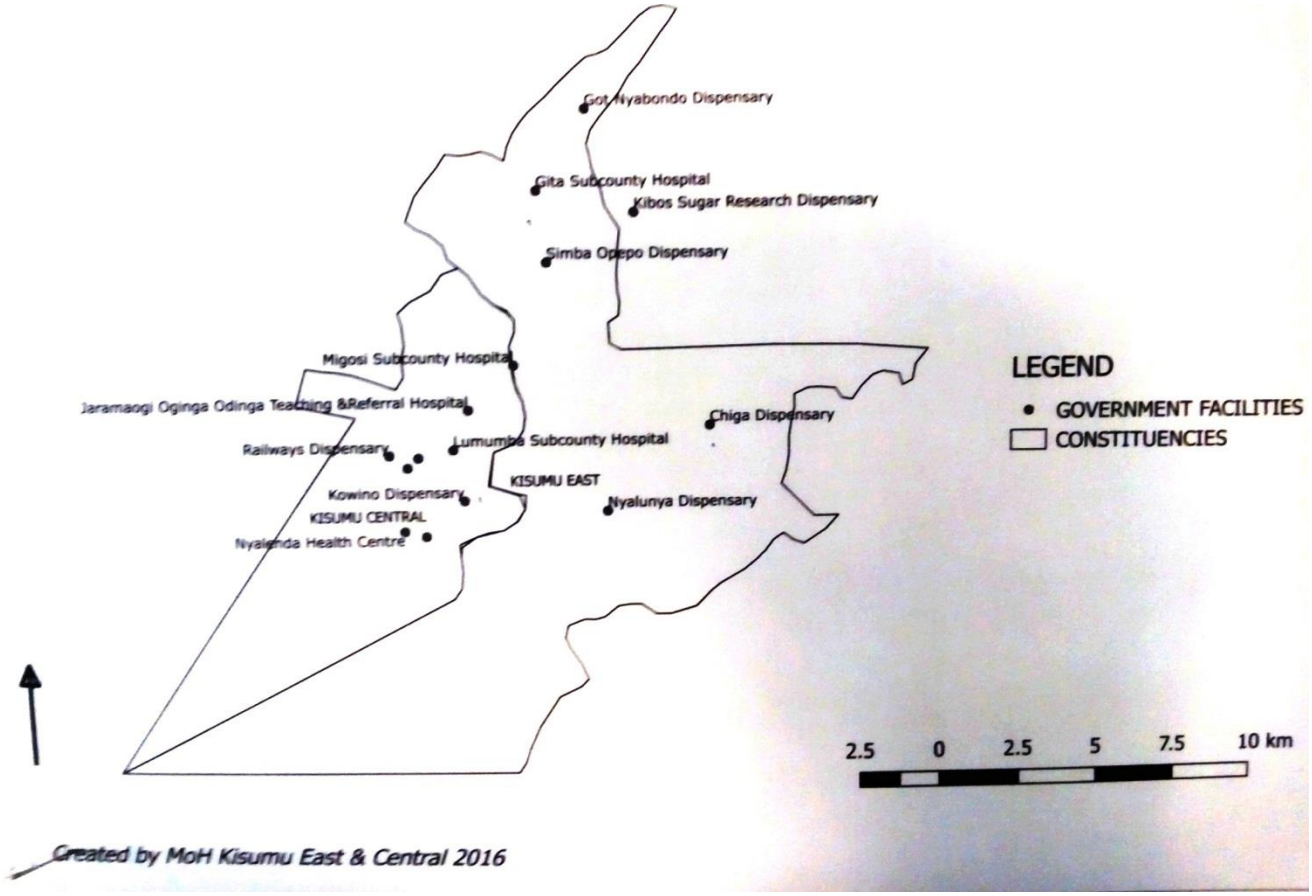
Copy to:

The County Commissioner
Kisumu County.

The County Director of Education
Kisumu County.

APPENDIX VIII

Research Map



APPENDIX IX

University Letter

UNIVERSITY OF NAIROBI
OPEN, DISTANCE AND e-LEARNING
SCHOOL OF OPEN DISTANCE LEARNING
KISUMU CAMPUS

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

11TH JULY, 2017

Dear Sir/Madam,

RE: ALOO ZEDEKIAH OJUKI - REG NO: L50/83508/2015

This is to inform you that **ALOO ZEDEKIAH OJUKI** named above is a student in the University of Nairobi, Open, Distance and e-learning centre, School of Open and Distance learning, Kisumu Campus.

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

The research title approved by the School Board of Examiners is*: "factors influencing provision of healthcare services in the devolved system of government in Kisumu east sub county, Kenya".* The Project is part of the pre-requisite of the course and therefore, we would appreciate if the student is issued with a research permit to enable him collect data and write a report. Research project reflect integration of practice and demonstrate writing skills and publishing ability. It also demonstrates the learners' readiness to advance knowledge and practice in the world of business.

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

Yours Faithfully

Dr. Stephen Okelo, PhD
COORDINATOR ODeL
KISUMU CAMPUS

CO-ORDINATOR
SCDE – KISUMU CAMPUS
11 JUL 2017
P. O. Box 825 – 40100,
KISUMU

FACTORS INFLUENCING PROVISION OF HEALTHCARE IN THE DEVOLVED SYSTEM OF GOVERNMENT A CASE OF KISUMU EAST SUBCOUNTY,KENYA

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