2020

The influence of of devolved governance on the performance of health sector in Homa Bay county in Kenya.

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ANALYSIS OF THE INFLUENCE OF DEVOLVED GOVERNANCE ON THE PERFORMACE OF HEALTH SECTOR IN HOMA BAY COUNTY IN KENYA

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MPPM/78925/16

A research dissertation submitted in partial fulfilment of requirements for the award of the degree of Master of Public Policy & Management at Strathmore University

MAY, 2019

DECLARATION

I declare that this work has not been previously submitted and approved for the award of a degree by this or any other University. To the best of my knowledge and belief, the dissertation contains no material previously published or written by another person except where due reference is made in the dissertation itself.

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APPROVAL

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

Dr. Thomas Kibua
Strathmore University Business School

Sign…….....
Date ……...

DEDICATION

To Dr. Ong'ang'a and Regina Obiero, my parents, for their kindness and devotion, and for their endless support your selflessness will always be remembered. Thanks.

ACKNOWLEDGEMENTS

I would like to thank my supervisor Dr. Thomas Kibua for his insightful criticism and guidance towards completing my dissertation. Special thanks to him as he has walked with me all through the course and offered valuable advice throughout my career.

I'm indebted to my family who were my source of inspiration in this journey. I deeply appreciate my wife Daisy Nyaundi, whose encouragement and inspiration kept me going. I'm also truly thankful to my parents and siblings for cheering me on.

I'm thankful to Strathmore University Business School for this honour.

Most importantly, I owe it all to the Almighty God.

ABSTRACT

Healthcare sector in Kenya has experienced a lot of challenges since independence under a highly centralized government system. Health management was guided by decisions made at the capital, affecting equitable distribution of health funds and creating inequalities in the provision of health services across the country. It is against this backdrop that devolution was considered under the 2010 constitution to change the management of health system in Kenya. However, this transformation which saw the transfer of responsibilities and authority of health service delivery to county governments has not improved the performance of the healthcare system in most Counties in Kenya. Probably, this could be attributed to the complexity of Kenya's devolution framework, general mismanagement or the counties' unpreparedness to deliver the services. Other reports have also indicated that political pressure from the newly elected county governments led to a bulk transfer of functions, irrespective of the counties' level of preparedness. This study analysed the influence of devolved governance on the performance of health sector in Homa Bay County, Kenya. The study was guided by four objectives: To determine the influence of devolved governance on the level of access of health services in Homa Bay County, Kenya; establish the influence of devolved governance on the status of human resource management in the health sector in Homa Bay County, Kenya; evaluate the influence of devolved governance on healthcare infrastructure in Homa Bay County, Kenya and assess the influence of devolved governance on funding and expenditure in health care in Homa Bay County, Kenya. The study adopted the descriptive survey research design. The target population was 90 nurses, 42 Ward Administrators, 3 County Executive Health Officers, 9 Sub-County Health Superintendents' from Homa Bay County. Purposive sampling method was adopted to come up with a sample size of 93 respondent's reprsenting 9 Sub-County Health Superitendants, 58 nurses and 26 Ward Administrators. Primary data was collected using questionnaires and Key Informant Interviews. Key Informant interview guide was used to collect information from interviewees. Questionnaire was used to collect information from the 9 Sub-County Health Superitendants from Homa Bay County while questionnaire was used to collect information from the 26 Ward Administrators and 58 nurses. Secondary data was sourced from health sector reports in Kenya from the year 2010 to 2014, documentary reviews of the minutes of meetings, Homa Bay County Integrated Development Plan 2013-2017, Homa Bay County Fiscal Strategy Paper (2015), Homa Bay County Health Sector Strategic and Investment Plan 2013-2017, the Homa Bay County Referral Hospital strategic plan and notices and memos on the notice boards health sector reports in Kenya from the year 2010 to 2014. The collected data was then analyzed through frequencies and percentages to enable the research come up with conclusions and recommendations for the study. The researcher employed the assistance of some computer tools, including the Statistical Programmes for Social Sciences (SPSS) and excel version 16 to analyze the data quantitatively. The analyzed data was presented in the form of graphs tables and charts. The Study established that devolution process has not been fully implemented and its effect has not been fully experienced in the health sector. The study found out that devolution of the procurement process has enhanced access to drugs and equipment in hospitals, however, health facilities still serve low number of patients. Employment in healthcare sector in affected by better remuneration in private sector. It was recommended that the health sector players should improve in financing of critical health investment areas, particularly those relating to improving quality of care, purchase of specialized equipment so as to restore public perception of good quality care and achieve devolution goals on improvement of primary health care facilities.

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CHAPTER ONE

BACKGROUND OF THE STUDY

1.1 Historical transformation of Kenyan healthcare system

Since independence in 1963, centralization has been at the core of Kenyan governance, with power concentrated in the capital with spatial inequalities during this period of time. It is against this backdrop that devolution was considered in the revised 2010 constitution. The new constitution introduced a new governance framework with a national government and 47 counties, which differed from the old constitutional framework that facilitated political and economic disempowerment and unequal distribution of resources (World Bank, 2012). The highly centralized government system also led to weak, unresponsive, inefficient, and inequitable distribution of health services in the country (Ndavi et al., 2009). It is was therefore expected that a devolved health system will improve efficiency, stimulate innovation, improve access to and equity of services, and promote accountability and transparency in service delivery (Bossert, 1998).

Kenyan at sub-district levels, local government in the urban areas (Bosset, 1998).When Kenya gained independence in 1963, one of her first proposals under the new government was "free healthcare to all Kenyans" with the belief that a healthy nation would create greater economic development. By 1965, the government finalized the "Free Healthcare for All" concept and abolished user fees for people seeking care in locally managed public clinics. In 1965, National Hospital Insurance Fund was introduced to provide healthcare insurance cover to patients (Bosset, 1998). Healthcare System has undergone historical transformation since 1963. At independence, Kenya inherited a three- tier health system: the central government at the district, provincial and national levels, Missionaries NHIF).

In 1970, the Ministry of Health (MOH) nationalized the health system and extended the "Free Healthcare for All" policy to all public health facilities (NEA, 2016). Health centers became the crucial points for preventive, promotive and limited curative services. However, when the economy stagnated in 1973, it became financially impossible to operate public facilities without charging user fees, hence, in 1989, the MOH had to reinstate user fees (cost sharing or Facility Improvement Fund). Later in 1992, District Health Management Boards were created to facilitate cost-sharing and ensure the availability of funds for health services in peripheral areas. Due to continuing financial restraints more intensive restructuring of the health systems were implemented by the mid-1990s (NEA, 2016).

In 1994, the Government of Kenya (GOK) approved the Kenya Health Policy Framework (KHPF) as a blueprint for developing and managing health services. It spelled out the long-term strategic imperatives and the agenda for Kenya's health sector in providing: "quality healthcare that is acceptable, affordable and accessible to all", by 2010 and onwards. To operationalize the document, the Ministry of Health (MOH) developed the Kenya Health Policy Framework Implementation Action Plan and established the Health Sector Reform Secretariat (HSRS) in 1996 under a Ministerial Reform Committee (MRC) to spearhead and oversee the implementation process (Kenyan Healthcare Sector Market Study Report, 2016). A rationalization programme within the MOH was also initiated. The above policy initiatives aimed at responding to the following constraints: decline in health sector expenditure, inefficient utilization of resources, centralized decision making, inequitable management information systems, outdated health laws, inadequate management skills at the district level, worsening poverty levels, increasing burden of disease, and rapid population growth (Kenyan Healthcare Sector Market Study Report, 2016).

With decentralization as a guiding strategy, this policy has been implemented via two 5-year plans: The National Health Sector Strategic Plan (NHSSP – from 1999-2004) and the National Health Sector Strategic Plan II (NHSSP II – from 2005-2010). Under the framework, the NHSSPs set out the public health system organized in hierarchical pyramid. Village dispensaries, which are the highest in number and providing the lowest level of care – comprise the lowest level of the pyramid. District health centres and provincial hospitals are fewer and higher on the pyramid. At the top of the pyramid include facilities such as Kenyatta National Hospital (KNH), the largest (public) hospital (NEA, 2016).

1.1.1 First health sector strategic plan (1999-2004)

The development of the first National Health Sector Strategic Plan (NHSSP-I) for the period 1999-2004 was a follow-up to the Ministry of Health's efforts to translate the policy objectives into an implementable programme (MOH, 1999a). In addition to taking into account past constraints, the document involved key stakeholders in the planning process through consultative workshops within the Ministry itself and with other stakeholders such as development partners, public sector, districts, and provinces, the private sectors, NGOs, religious groups, professional organizations, communities, and users of health services, as well as teaching and research institutions (Muga et al, 2005). The end product thus incorporated the views and priorities of all these groups. The NHSSP-I was evaluated in September 2004 by an external team of independent

consultants. The evaluation found that:

> ...despite having well focused national health policies and reform agenda whose overriding strategies were focused on improving health care delivery services and systems through efficient and effective health management systems and reform, the overall implementation of NHSSP-I (1999-2004) did not manage to make a breakthrough in terms of transforming the critical health sector interventions and operations towards meeting the most significant targets and indicators of health and socio economic development as expected by the plan (Muga et al, 2005, p. 3).

This could be attributed to a set of factors, most of which are inter-related. These were:: absence of a legislative framework to support decentralization; lack of well-articulated, prioritized and costed strategic plan; inadequate consultations amongst MOH staff themselves and other key stakeholders involved in the provision of health care services; Lack of institutional coordination and ownership of the strategic plan leading to inadequate monitoring of activities; Weak management systems; Low personnel morale at all levels; and Inadequate funding and low level of resource accountability (Muga et al, 2005).

As a result, the efforts made under NHSSP-I did not contribute toward improving Kenyans' health status: ironically, health indicators showed a downward trend. Infant and child mortality rates increased, the use of health services in public facilities declined; in 1990 there were 0.6 new consultations per person, while in 1996, there were only 0.4 new consultations per person. The doctor-to-population ratio also declined from the 1980s to the 1990s. The public sector's contributions to healthcare stagnated, going from US$ 12 per person in 1990 to US$ 6 per person in 2002. In more general development terms, poverty levels also in- creased, going from 47 per cent in 1999 to 56 per cent in 2002 (MOH, 2008)

1.1.2 The second health sector strategic plan (NHSSP-II): 2005-2010

In a renewed effort to improve health service delivery, the Ministry of Health and stakeholders reviewed the NHSSP-I service delivery system in order to devise a new strategy for making it more effective and accessible to as many people as possible (MOH, 2004a). The recommended changes are contained in the Second Health Sector Strategic Plan. This plan proposed to improve service delivery by using the following levels of care delivery. Level1, the community level, would be the foundation of the service delivery priorities. Once the community was allowed to define its own priorities and once services are provided that supports such priorities, real ownership and

commitment could be expected. Village Health Committees (VHC) were to be organized in each community through which households and individuals could participate and contribute to their own health and that of their village (GOK, 2010). Levels 2 and 3 (dispensaries, health centres, and maternity/nursing homes) would handle Kenya Essential Package for Health (KEPH) activities related predominantly to promotive and preventive care, but also various curative services.

Levels 4-6 (primary, secondary and tertiary hospitals) would undertake mainly curative and rehabilitative activities of their service delivery package. They would address to a limited extent preventive/promotive care. In this way, the existing vertical programmes would come together to provide services to the age groups at these various levels. The plan adopted a broader approach, a move from the emphasis on disease burden to the promotion of individual health based on the various stages of the human cycle: pregnancy and the newborn (up to two weeks of age); early childhood (two weeks to five years); late childhood (6-12 years); youth and adolescence (13-24 years); adulthood (25-59); and the elderly (60+years) (GoK, 2010).

1.1.3 Vision 2030 and health care in Kenya

The Government of Kenya developed Vision 2030as its new long-term development plan for the country. The aim of the Kenya Vision 2030 is to create "a globally competitive and prosperous country with a high quality of life by 2030" through transforming the country from a third world country into an industrialized, middle income country. To improve the overall livelihoods of Kenyans, the country aims to provide an efficient integrated and high quality affordable healthcare system. Priority will be given to prevented care at community and household level, through a decentralized national health-care system. With devolution of funds and decision-making to county level, the Ministry headquarters will then concentrate on policy and research issues (Kenya Health Policy, 2012–2030).

With the support of the private sector, Kenya also intends to become the regional provider of choice for highly-specialized health care, thus opening Kenya to "health tourism". Improved access to health care for all will come through: provision of a robust health infrastructure network countrywide; improving the quality of health service delivery to the highest standards; promotion of partnerships with the private sector; providing access to those excluded from health care for financial or other reasons (Kenya Health Policy, 2012–2030).The country recognizes that

achieving the development goals outlined in Vision 2030 will require increasing productivity. The health sector is expected to play a critical supportive role in maintaining a healthy workforce which is necessary for the increased labour production that Kenya requires in order to match its global competitors. Health is therefore one of the key components in delivering the social pillar 'Investing in the People of Kenya 'for the Vision 2030 (GOK, 2010).

1.1.4 Devolution of Healthcare in Kenya

Under the new constitutional framework, health service delivery function was formally transferred to counties on August 9, 2013, and one-third of the total devolved budget of KSh 210 billion was earmarked for health in the 2013/2014 budget following the transfer. Responsibility for health service delivery is assigned to the counties while policy, national referral hospitals, and capacity building are the national government's responsibility (Constitution of Kenya, 2010).

The objectives of devolution include, among others: the promotion of democracy and accountability in delivery of healthcare; fostering of seamless service delivery during and after the transition period; facilitating powers of self-governance to the people and enhancing their participation in making decisions on matters of health affecting them; recognizing the right of communities to manage their own health affairs and to further their development; protection and promotion of the health interests and rights of minorities and marginalized communities, including informal settlements such as slum dwellers and under-served populations; and promotion of social and economic development and the provision of proximate, easily accessible health services throughout Kenya (GoK, 2014).

The two levels of governments have specific functions assigned to them which are as follows: National government: leadership of health policy development; management of national referral health facilities; capacity building and technical assistance to counties; and consumer protection, including the development to norms, standards and guidelines. County governments: responsible for county health services, including county health facilities and pharmacies; ambulance services; promotion of primary healthcare; licensing and control of undertakings that sell food to the public; cemeteries, funeral parlours and crematoria; and refuse removal, refuse dumps, and solid waste disposal(COK, 2010). The national MOH provides policy support and technical guidance to priority national programs and stays in charge of the national referral hospitals and remains responsible for

HR for health (university teaching hospitals, public universities and medical schools (MoH, 2014).

The government committed to address reforms aimed at decentralization of the country's health management system, to increase decision-making power for resource allocation and service delivery at the county and facility levels and to allow for greater community involvement in health management. These reforms have been based on principles outlined in two Health Sector Strategic Plans. Furthermore, District Health Management Boards and District Health Management Teams (DHMTs) have taken on responsibilities to facilitate specific operations according to the Health Sector Strategic Plans within their counties (Ndavi et al., 2009).

1.2 Challenges facing the health sector in Kenya (before and after devolution)

The Kenyan healthcare system can be divided into three subsystems: the Public Sector, Commercial Private Sector, and Faith Based Organizations (FBO's. The Public Sector is the largest in terms of the number of healthcare facilities, followed by the Commercial Private Sector and the FBOs (Ndavi et al., 2009).

1.2.1 Healthcare Infrastructure in Kenya

The GOK has developed the Kenya Health Sector Strategic and Investment Plan 2013-2017 (KHSSP) in which it sets out it strategic directions and lines out its key focus points. Regarding the medical infrastructure, the KHSSP includes all investments relating to physical infrastructure, medical equipment, communication and ICT and transport. Over half of the Kenyan healthcare facilities have old infrastructure which however do not conform to the current norms and standards with respect to expected staffing, infrastructure and equipment (MOH, 2013b).

Even though the KHSSP includes plans to expand the medical infrastructure, significant challenges are present especially in relation to equity in distribution. The MOH is keen to invest in medical infrastructure projects that are geared towards addressing and achieving equitable geographical access to healthcare. The KHSSP reckons that availability and functionality of diagnostic medical equipment is critical in treatment and that most medical equipment in public health facilities are over 20 years old, therefore breaking down often. Furthermore, the facilities do not have modern equipment prompting the MOH to make investments in modern medical

(diagnostic) equipment a key priority for the coming years (MOH, 2013b).

The Kenyan Health Policy 2014-2030 sets out the direction of the country to ensure significant improvement in the overall health status in Kenya. In June 2013, the Senate agreed that the Government establish a level 5 and level 4 hospital in each of the 47 counties before the end of the government term in 2017 (MOH, 2013a). Before the devolution, Kenya had 6 levels of healthcare provision, which changed to a system of 5 levels. The previous level 5 hospitals in the county have become County referral hospitals and the previous level 4 hospitals are now known as sub-County referral hospitals. In order for these developments to take place the medical equipment facilities needed to be upgraded, hence the MES project which was initiated by the National and County governments (KPMG International, 2013).

The MES project has been designed to cover 6 areas of care: dialysis, emergency, maternal and child health, basic and advanced surgery, critical care and imaging services. To address these areas, the equipment were placed under seven lots or categories: theatre- sterilization - laboratory- dialysis (renal)- Intensive Care Unit- Radiology which covers imaging (X-ray). All the selected County hospitals and two national referral hospitals are to receive theatre, sterilization and radiology equipment. Further, each County referral hospital and the two hospitals out of the targeted 49 have acquired dialysis equipment. Two out of the 11 have received ICU equipment, and 53 out of 98 hospitals have required digital X-ray equipment (radiology) like ultra sound and mammography unites (KPMG International, 2013).

The main medical equipment suppliers under current contracts are Philips, General Electric and Toshiba. Through the MES project, each of the 47 counties will acquire different sets of medical equipment in order to bring the services to all Kenyans and lift the financial burden. In the near future, a county referral hospital and one sub-county hospital will be upgraded to a level 5 and level 4. In addition, several level 5 hospitals (Kenyatta National Hospital, Moi Teaching Hospital, National Spinal Injury Hospital and the Mathari Teaching and Referral Hospital) will get equipment upgrades (MOH, 2013a).

1.2.2 Human resources for health

The population densities of doctors and nurses are important indicators of a county's capacity to

provide adequate primary healthcare coverage. The proportion of doctors per 10,000 people in the 47 counties ranged from 0 (Mandera) to 2 (Nairobi). These rates are below the national benchmark of 3 medical officers per 10,000 people (MOH, 2013b). Counties had higher population density rates for nurses, ranging from 0.9 per 10,000 in Mandera to 11.8 per 10,000 in Isiolo (Ministry of medical services, 2010). However, just four counties met Kenya's benchmark of 8.7 nurses per 10,000 people (MOH, 2013b). In general, counties with higher population densities of doctors tend to have higher population densities of nurses. Since measurements of quality of care are just as important as quantifying the size and distribution of the healthcare workforce, the low number of doctors and nurses in most counties is an obvious challenge to provision of healthcare services (Kenya Health Policy, 2012).

Indeed, Kenya is one of the countries identified by the WHO as having a "critical shortage" of healthcare workers mostly affecting the rural areas where, as noted in a recent study by Transparency International, under-staffing levels of between 50 and 80 per cent were documented at provincial and rural health facilities. Most health workers are employed in the private sector, in which the competition for doctors drives the costs of healthcare. Major challenges facing the health sector are, improving the capacity of training, efficiency of health workers, and reducing brain-drain where trained health workers look for greener pastures in the private sector and abroad (MOH, 2013b).

The WHO has set a minimum threshold of 23 doctors, nurses and midwives per population of 10, 000 as necessary for the delivery of essential child and maternal health services. Kenya's most recent ratio stands at 13 per 10 000. The World Health Organization (WHO) recommends at least 23 doctors, nurses and midwives per 10,000 people. Kenya has one doctor, 12 nurses and midwives per 10,000 people (WHO, 2006). The health worker shortage but also inefficiency of health workers is a big challenge for the Kenyan health ecosystem at large. The largest short fall of health workers is in the rural areas whereas the urban areas are often not facing health worker shortages but have health workers that lack a certain level of capacity and efficiency (KIPPRA, 2012).

The majority of the Kenyan health workforce works in the private sector, almost 75% of the medical doctors and 66% of the nurses and clinical officers. Notably, since the 1980s/1990s the

regulatory board allows health workers to work in both the public and private sector at the same time. This means that a doctor can work in the morning hours at a public health facility and in the afternoon work in or run his/her own private practice (KIPPRA, 2012).

Table 1.1: Health worker breakdown per sector

Cadre	Total Registered (2007)	Public sector (2008)	Private sector (2008)	Private sector % of total
Doctors	6,271	1,605	4,666	74
Dentists	631	205	426	68
Pharmacists	2,775	382	2,393	86
Pharmaceutical Technologists	1,680	227	1,453	86
Nursing officers	12,198	3,013	9,185	75
Enrolled Nurses	31,971	11,679	20,238	63
Clinical Officers	5,797	2,202	3,595	62

Source: Kenya Institute for Public Policy Research and Analysis (KIPPRA) (2012), Kenya Economic Report 2012

The Kenyan health care system and especially the public sector has a large shortage of qualified health workers. Due to financial constraints, the government is not able to provide attractive salaries and maintain its health workers on board. This results an over stressed HR system and causes regular strikes in public health facilities. As mentioned before, it is not uncommon to find a medical doctor working in the public sector in the morning, and in the afternoon he/she is working at a private practice, what is commonly referred to as 'moonlighting' (KIPPRA, 2012).

The limited number of health staff has been further worsened by absenteeism, i.e., the frequency of sanctioned or unsanctioned absence from work. High staff absenteeism is detrimental to healthcare delivery. Staff absenteeism varied greatly by county, from 7 per cent in West Pokot to 65 per cent in Trans-Nzoia. Additionally, the quality of care is largely dependent on clinicians' ability to accurately diagnose patients. The percentage of clinicians who correctly diagnosed

seven different conditions ranged from 64 per cent in Kilifi to 84 per cent in Makueni (KIPPRA, 2012).

1.2.3 Access to healthcare services

There is a large disparity among these health facilities, especially in rural areas against the high population. Even though it is a requirement that Health facilities must be physically available for the population to access healthcare services. Just 63 per cent of Kenyans have access to government health services located within an hour of their homes, and greater distance to a facility is a significant factor in decreased demand for healthcare in the country Chester, 2016). Half of the counties have fewer than 2 health facilities per 10,000 people and fewer than 4.2 facilities per.100 square kilometres.

Densely populated Mombasa and Nairobi have 134 and 124 health facilities per 100 square kilometers, respectively, but far fewer facilities per 10,000 people (2.9 and 2.4, respectively). Marsabit, Tana River, and Isiolo have the fewest health facilities per 100 square kilometres, but above-average numbers of health facilities per 10,000 people (MOH, 2013a). This suggests that while these counties may have a sufficient number of facilities for the population, patients must travel long distances to reach them.

The quality of treatment also depends on drug availability in facilities. In all 47 counties, more facilities had maternal health drugs than child health ones. On average, 34 to 63 per cent of counties had maternal health tracer drugs in their facilities, but just 18 to 39 per cent had child health tracer drugs. There were large disparities in the availability of all first-line HIV drugs (ranging from 0–50%) and 4FDC for TB (12–74%). Few facilities had drugs for diabetes; the availability of Metformin ranged from 2 to 35 per cent across the counties (Noor et al., 2006). Counties tended to have greater availability of first-line treatment for malaria (ACT) than the other drugs. Data on countywide availability of drugs ranges from 44 to 97 per cent. Five counties (Isiolo, Kisumu, Kisii, Vihiga, and Siaya) were consistently ranked in the top third of counties for drug availability, indicating that they were relatively more prepared to provide treatment. The counties consistently rated in the bottom third were Trans-Nzoia, Elgeyo-Marakwet, Nandi, Nyeri, Homa- bay and Tana River, which may be less prepared than others to provide high-quality care (Mwabu et al., 1993).

1.2.4 Health funding and expenditure

The Total Health Expenditure (THE) has increased over the years by about 33% in a 2 year time frame to KES 234 billion or USD 2,743 million in 2012/13. The health sector in Kenya relies on several sources of funding: public (government), private firms, households and donors (including faith based organizations and NGOs) as well as health insurance schemes. Consumers are the largest contributors, representing approximately 35.9 per cent, followed by the government of Kenya and donors at 30 per cent each (KPMG, 2015).

Over the past few years, government financing as a percentage of GDP has been consistent at slightly above four per cent. As a signatory to the 2001 Abuja Declaration, Kenya committed to allocating at least 15 per cent of its national budget to health. Not only is Kenya spending a relatively low amount as a percentage of GDP on healthcare, but the allocation of funds to public facilities has been uneven. According to a 2011 Healthy Action report, secondary and tertiary facilities have historically been allocated 70 per cent of the health budget. The same report notes that allocation of funds to primary care facilities has been "poor" – this is despite the significant role these facilities play as the first point of contact in the provision of healthcare services (KPMG, 2015).

The share of government spending in the government budget depicts general under financing of publicly provided for services, even though for some services especially for non-communicable diseases, the gap is bridged by donors (Bultman, 2014). In the Health Financing Strategy of 2010, the government emphasized social health protection to all Kenyans by introducing social solidarity mechanisms founded on complementary principles of social health insurance and tax financing for purposes of financial protection of the poor and other vulnerable groups. In order to achieve the set objectives, the government reiterated its commitment to amend the NHIF Act for purposes of enhancing access, and broadening benefit package. In the new constitution promulgated in 2010, the government provided the necessary legal framework for ensuring a comprehensive and people-driven healthcare delivery aimed at enhancing access to quality and affordable health care (Okech & Lelegwe, 2016).

Recent initiatives of "Beyond Zero Tolerance" campaign for expectant mothers, children and breast cancer are some of the latest efforts towards UHC. This has seen many stakeholders pull

resources towards the initiatives although there are still no reliable statistics to inform policy dialogue on the pack of the initiatives. Whereas this is positive step in the right direction, there is lack of policy to support the initiative to ensure sustainability in the event of political regime change, which is undoubtedly expected in a democratic society (Okech & Lelegwe, 2016). Unfortunately, limitations in implementing an overall healthcare financing strategy have hindered effective planning, budgeting and provision of health services. The health system has also struggled with stagnant or declining budgets for health, system inefficiencies, persistently poor service quality and lack of equity (Nyakundi, et al., 2011).

The transfer of healthcare to Counties was expected to improve efficiency, stimulate innovation, improve access to and equity of services, and promote accountability and transparency in service delivery (Barker, Mulaki, Mwai, & Dutta, 2014). However, the delivery of healthcare services in most counties in Kenya continues to elicit public concern due to general provision of poor services (MOH, 2013a). It is not clear whether this could be attributed to the complexity of Kenya's devolution framework, general mismanagement or the counties unpreparedness to deliver the services. Other reports have indicated that, political pressure from the newly elected county governments led to a bulk transfer of functions, irrespective of the counties' level of preparedness (Catherine et al, 2014).

The implementation process has generated concerns about the counties' readiness to deliver services. The Transition Authority (TA) set specific timelines and criteria for the assessment of county preparedness to take up devolved functions, but the criteria are generic, making it difficult to determine whether counties are ready to offer the health services under their ambit. In addition, political pressure from the newly elected county governments led to a bulk transfer of functions, irrespective of the counties' level of preparedness. Thus, the complexity of Kenya's devolution framework has generated concern over the delivery of healthcare services among most of the 47 counties in Kenya (Ndavi et al., 2009).

Even after devolution and transfer of health sector to county governments from 2013, generally, the health sector in Kenya is still severely under-resourced by international standards. For example, in the 2014 – 2015 National Budget, health care was allocated a paltry 2.8% against the Abuja Declaration of a minimum of 15% of the GDP (WHO, 2012). Among various geographical and

economic groups, there is evidence of inequality in resource allocation. Health indicators such as infant and child mortality, maternal mortality, immunization coverage, and fertility rates demonstrate a correlation between high poverty levels and poor health outcomes (Catherine, et al, 2014).

1.3 Healthcare status in Homa Bay County before and after devolution

Homa Bay County has 211 health facilities including nine tier three hospitals and four mission hospitals. The rest are health centres and dispensaries most of which are connected to community health units. These facilities are manned by 941 personnel mostly nurses with a doctor- population ratio at 1: 40,000 and nurse-population ratio at 1:1,500. This is way above the national average and measures should be in place to remedy the imbalance and address the consequent lack of quality health care provided in low tier health facilities (CIDP, 2013).

It is estimated that the County has a bed capacity upwards of 2,190 in public facilities and 12 in mission facilities. These capacities enjoy over 100 per cent occupancy meaning there exists sharing of beds in health facilities. There is need for further investment in in-patient care services especially wards where more observed care can be provided by trained health professionals such as medical doctors, clinical officers and nurses (CIDP, 2013). The five most common diseases in Homa Bay County, accounting for more than 70 per cent of all morbidity are malaria (36 per cent), Upper Respiratory Tract Infection (15%), diarrhoea (11 per cent), pneumonia (10 per cent) and skin diseases (10 per cent). Prevalence of diseases such as pneumonia, meningitis, and tuberculosis have been noted to be on the rise and, save for cases of malaria and diarrhoea, up to 30 per cent of these diseases are linked to HIV/AIDS (CIDP, 2013).

The immunization coverage in Homa Bay County averages 68.5 per cent. This has reflected an increase in coverage by 17.8 per cent over the period 2010-2011, thanks to frequent immunization campaign programmes by the ministry of health. The immunization coverage however comes against the background of reports of skilled deliveries at health facilities standing at 47.4 per cent and women receiving post-natal care standing at 38.8 per cent. Therefore, there is need for more campaigns to enable the county achieve full immunization coverage in the medium term (CIDP, 2013).

Access to family planning services in the county is estimated to be at 54 per cent with the highest

access recorded in Homa Bay Town and the lowest recorded in Suba. Contraceptive acceptance is estimated to be at 69 per cent among adult women of reproductive age. This means more investment is needed to raise the level of awareness and acceptance of family planning as a measure to bring population growth in line with expected welfare growth (CIDP, 2013).

HIV/AIDS is a major development challenge in the County. The county has an HIV/AIDS prevalent of about 27.1 per cent compared to the national average of about 6.3 per cent. The most dominant mode of transmission of HIV/AIDS in the county includes sexual contacts, blood transfusion and mother to child transmission. The main factors which have enhanced the spread are retrogressive cultural practices of wife inheritance, commercial and fish-for-sex exchanges especially around the beaches and bars, multiplicity of partners, alcohol and drug abuse. HIV/AIDS has affected all groups in the population, but the most affected have been those between the ages 15-45 years who are considered to be sexually active. However, the youth in the age bracket of between 14 and 25 years are the most vulnerable (CIDP, 2013).

To achieve MDGs 4, 5 and 6; the county has proposed to rehabilitate all health facilities in order to improve service delivery, construct new health facilities to reduce the distance to the nearest health centre and increase the immunization coverage for children under. On HIV/AIDS, there are plans to integrate HIV/AIDS programmes in all the county activities. VCT and PMTCT services are to be decentralized to low-level health facilities and issue of governance will be addressed through the enhanced collaboration and sharing of information between the various partners in the sector. Meaningful ways of cooperation to be sought include sector working groups and sector committees which will handle the critical areas of sector planning and M&E (CIDP, 2013).

The sector targets secondary school age population in implementation of behaviour change communication targeting reduction of new HIV and Aids infections. This population of school going age is particularly vulnerable and specific measures to mitigate this vulnerability include youth friendly leisure centres and VCT sites (CIDP, 2013). Homa Bay County, with poverty levels of about 60% according to the County Fiscal Strategy Paper (CFSP, 2015), experiences many structural and health challenges which impact negatively on the health of the population. Its performance on the health related Millennium Development Goals (MDGs) is poor, with infant (95 per 1000) and child (133 per 1000) mortality rates that are double the national average, poor maternal and reproductive health, high

morbidity and mortality due to malaria, low immunization coverage of 53.6% against national average of 80%, and an HIV/AIDS prevalence of 15.1% against the national average of 6.3% (Benett, 2012).

1.4 Statement of the problem

When Kenya gained independence in 1963, one of her first proposals under the new government was "free healthcare to all Kenyans" with the belief that a healthy nation would create greater economic development. However, the highly centralized government system of 1963-2010 contributed to weak, unresponsive, inefficient, and inequitable distribution of health services in the country (Ndavi et al., 2009). It is was therefore expected that a devolved health system will improve efficiency, stimulate innovation, improve access to and equity of services, and promote accountability and transparency in health service delivery (Bossert, 1998).

However, healthcare services in most counties in Kenya continues to elicit public concern due to general provision of poor services (MOH, 2013a). Since the transfer of health services to the 47 counties in Kenya, the sector is under-resourced by international standards. For example, in the 2014 – 2015 National Budget, health care was allocated a paltry 2.8% against the Abuja Declaration of a minimum of 15% of the GDP (WHO, 2012). Other reports have indicated that, political pressure from the newly elected county governments led to a bulk transfer of functions, irrespective of the counties' level of preparedness (Catherine et al, 2014). (Ndayi et al.,2009).These conditions have continued to manifest in as much as the Transition Authority (TA) set specific timelines and criteria for the assessment of county preparedness to take up devolved functions.

A report contained in Homabay County Integrated Development Plan (2013–2017) indicates that cases of serious understaffing and lack of medical equipment are widely reported about Homabay county's health facilities (CIDP-Homa-Bay, 2013). This has been especially so because the health facilities are widely dispersed in remote locations where essential comforts such as housing, water and electricity are lacking. Under the Economic Stimulus Programme (ESP), each constituency in the country had a chance to recruit medical personnel of various categories, but in Homa Bay County, securing personnel has remained a challenge with most positions for nurses and public health technicians going unfilled in some constituencies. Furthermore, attracting and retaining medical personnel in many of these facilities continues to be a nightmare for the county and worse still, requisite professional cadres such as doctors, nurses and clinical officers are still in short

supply. This calls for the need for better training facilities for health professions in the county and sensitization of youth to take up careers in areas where shortages have been noted. Issues of stock outs on essential drugs have also been common, promoting health risks in the hospitals, as well as, affecting the economic status of households in the County, as they seek drugs from private pharmacies (Odiwuor & David, 2014).

It is not clear whether this could be attributed to the complexity of Kenya's devolution framework, general mismanagement or the counties unpreparedness to deliver the services. Other reports have also indicated that, political pressure from the newly elected county governments led to a bulk transfer of functions, irrespective of the counties' level of preparedness (Odiwuor & David 2014). The County's leadership ability to develop effective strategies that account for change, and the will as well as the ability to actively manage the momentum of the devolution is also questionable. It is against this background that this research seeks to assess the impact of devolution on delivery of healthcare services in Homa Bay County-Kenya from 2013-2018

Considering that a strong, efficient, well-run health system and a sufficient capacity of well trained, motivated health workers among other pillars are important in realizing universal health coverage, this research aims to fill the knowledge gap by assessing the performance of Homa Bay County's health infrastructure, access and healthcare workforce before and after devolution in Kenya.

1.5 Objectives of the study

1.5.1 General objective

The general objective of the study is to analyse the influence of devolved governance on the performance of health sector in Homa Bay County in Kenya

1.5.2 Specific objectives

i. To determine the influence of devolved governance on the level of access of health services in Homa Bay County, Kenya.
ii. To establish the influence of devolved governance on status of human resource management in the health sector in Homa Bay County, Kenya.
iii. To evaluate the influence of devolved governance on healthcare infrastructure in Homa Bay County, Kenya.

iv. To assess the influence of devolved governance on funding and expenditure in health care in Homa Bay, Kenya.

1.4 Research questions

i. What has been the influence of devolved governance on the level of access of health services in Homa Bay County, Kenya?
ii. How has devolved governance influenced human resource status and management in the performance of health sector in Homa Bay County, Kenya?
iii. To what extent has devolved governance in healthcare infrastructure improved performance of health sector in Homa Bay County, Kenya?
iv. How has devolution of funding and expenditure in health care influenced the performance of health sector in Homa Bay County, Kenya?

1.5 Justification of the study

Economists and public policy analysts seek to answer the question of how to improve service delivery in order to improve the quality of life and standard of living. Devolution is one of the key ways through which such service delivery can be achieved (Frumence, Tumaini, Mughwira, & Anna-Karin, 2013). Devolution has implications that go far beyond service delivery and directly impact on the quality of life and standard of living (Bagaka, 2008). This is not the case as the county governments have not pursued service delivery as the main objective of devolution rather than economic efficiency (Kipruto & Letting, 2017) as advocated for by experts and economists.

Research was directed towards the study of health service delivery and devolution. This then creates a need for international comparison as well as cross-country evaluation on health service delivery through devolution (Kettl, 2000). The existing empirical studies have majored on the output of devolution as a factor of health service delivery. However, the aim of this study is to highlight the outcomes of the improved service delivery through devolution dimensions. The interaction of all the three dimensions of devolution brings a better understanding of the relationship between health service delivery and devolution.

In this regard, policy makers can base their policy and strategy on the knowledge derived from this relationship. This study also seeks to bring on board other control mechanisms that will help with

health service delivery (Pritchett, 1996). The study aims at assessing the impact of devolution on delivery of health care services in Homa Bay County in Kenya since 2013 with a special emphasis of Homa Bay County, so as to be able to compare and recommend best practices for adoption by other counties in Kenya and other countries devolving healthcare.

The study also aimed at providing information on areas for further research since devolution is a new concept in Kenya and despite other countries having devolved healthcare, every country has its own unique challenges and opportunities. Both the county governments and national government can make use of the findings to come up with strategic interventions to enhance service delivery to citizens. Sector players in the health sector would also find this study crucial as it will present the current scenario of devolution in the health sector and its impact on the internal and external customers as well as strategic planning in the sector. Other researchers in future will benefit from the study as it would be a reference point.

1.6 Scope of the Study

The study was confined to the four objectives. Further, the study was undertaken at Homabay County. The study was conducted on the public health officers, nurses at Couty and Sub-County hospitals and Ward Administrators from the 9 constituencies in Homa Bay County. These respondents were more readily available and were interviewed in their work stations. The hospital attendants were also targeted.

1.7 Limitations to the Study

This study has focused mainly on the performance of health sector in Homa Bay County before and after devolution in Kenya. These findings are therefore limited to the health sector and cannot be generalized to the other aspects of county governance, for example education, water and sanitation, youth and women empowerment. Contextually, this study was limited by scope and time. This study was done in Homa bay County and the interviewees were nurses at the department of health or the Ward Administrators of the 40 major wards in the county. Their responses may not be the actual reflection of the feeling and situation on the ground. Also, many other functions have been devolved not just health yet this study only focused on devolved health function.

Also, the nature of the documents required such as minutes of meetings and financial documents were deemed to be fairly confidential. There was reluctance to divulge some confidential

information particularly those to do with political interference in the affairs of the county, financial dealings, tendering and procurement of commodities. Some respondents were not available during data collection, while others were not willing to participate. Further, the experience of some of the respondents on health matters for instance Ward Administrators impeded on the accuracy of the information provided. However, the researcher inducted all targeted respondents on the significance and confidentiality of the information provided. Also, the respondents were assisted to comprehend the questions although not led to form any opinion.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter present the reviews of previous researchers on the health sector in Kenya and the organization and performance of the health sector in Kenya under devolved governments. Literature on procurement, the status of human resource management, healthcare infrastructure and strategies and regulatory framework used in the sector are specifically analysed in order to address the objectives of the study.

2.1.1 The health sector in Kenya

Reviews conducted by the Ministry of Medical Services and the Ministry of Public Health and Sanitation in 2010 have shown that the health sector has registered marginal improvements in the past few decades. Results from the review also indicates that approximately 78 per cent of Kenyans live in rural areas, yet a disproportionate share of healthcare facilities are located in urban areas (GOK, 2010). From this review, it can be deduced that healthcare in Kenya before the transfer of healthcare services to Counties was poor especially in the rural areas, where most people often have to travel long distances, and on foot, to seek medical care. This adds to the need for examining the status under devolution in order to measure if there have been reasonable improvements.

Drawing comparison between Kirinyaga and Wajir, World Bank report on health situation in Kenya showed that the index of access to health services between these geographical locations has great disparity. Over 8 in 10 children born in Kirinyaga County, which is located in the central part of the country, are delivered in a health facility while in Wajir, which is located in one of the most remote and marginalized regions of the country, 1 child in 20 is born in a health facility (World Bank, 2012). Apart from the specific problems observed in rural areas in Kenya as in the case of Wajir, Atieno and Spitzer (2014) have shown that health sector in Kenya continues to experience challenges especially regarding the high disease burden. They identified deterioration of Maternal Mortality Ratio from 414 in 2003 to 488 deaths per 100,000 live births in 2008-09 while births attended by skilled health personnel registered declined from 51 per cent in 2007 to 43 per cent in 2010/11.

Juma, Edwards, and Spitzer (2014) do not attribute these conditions to inadequate or lack of funding but instead argued that these conditions have prevailed despite considerable funding for the specific programmes.They have further indicated that by 2010, per capita health spending in Kenya still remained low at $42 compared to the WHO recommendation of $54 . In the Preventive and Promotive health programme, actual recurrent expenditures totalled Kshs. 12.4 billion in 2011/12, up from Kshs. 6.1 billion in 2009/10. Compensation to employees (personnel emoluments) accounted for36% of the total expenditure during 2011/12 FY which is a decrease from 41% in 2009/10 FY. Spending on personnel emoluments in the Ministry of Health has increased, but there is still a shortage of health workers. Expenditure on goods and services, grants, transfers and subsidies and acquisition of non-financial assets accounted for 48 per cent, 11 per cent and 5 per cent respectively in 2011/12 financial year. From these reports, there is evidence that the health sector in Kenya continues to underperform and the challenges faced by the national government have been replicated in different counties in Kenya and have been difficult to resolve.

Sihanya (2013) concurred with Juma et al (2014) by observing that Kenya has an average of 19 doctors and 173 nurses per100,000 population, compared to WHO recommended minimum staffing levels of 36 and 356 doctors and nurses respectively. Regarding the optimal staff establishment, the sector would require 72,234 staff. Currently the sector has an approved staff establishment of 59, 667 but only about 49,096 positions are filled, leaving 10,371 positions vacant (Sihanya, 2013). The situation has been exacerbated by poor working conditions resulting in brain drain which is adversely affecting research and development capacity in the health sector. This can be evidenced by recent experiences where the health sector has witnessed industrial unrest by the health professionals in different counties agitating for increased remuneration with serious budgetary implications within the sector. The shortages of Human Resource and industrial unrest have had negative impact on the Sector's capacity to deliver services under devolved structures, thus the need to evaluate progress in each of the devolved counties in Kenya (Tangcharoensathien et al, 2011).

2.1.2 Devolved governance in the health sector in Kenya

According to The Constitution of Kenya (2010) healthcare is a devolved function. Devolution, according to Potter (2001) is a form of decentralization involving the transfer of political,

administrative and fiscal management powers between central government and lower levels of government. Kimenyi (2006) noted that the advantages of devolution include: distributing authority over public goods and revenues to lower levels; fostering cooperation harmony and unity of purpose among communities; enhancing democracy by bringing governance closer to the people; improving efficiency in resource allocation; ensuring checks and balances along the various levels of government; empowering the minority and the marginalized; and, tailoring policies and service provision according to local values and preferences.

However, empirical evidence about the impact of devolution in Kenya depicts mixed results. Some scholars like Kalava (2016) noted that decentralization is expected to promote government responsiveness in service delivery to the citizenry, but Calamai (2009) posited that in some cases, devolution could worsen regional economic and political disparities especially in public spending and accountability. What Calamai has observed could apply to most counties in Kenya especially on provision of healthcare services, thus the need for investigation to identify the specific challenges, measure level of progress and propose mechanisms for improvement.

In a special issue 1795 of the Kenya Gazette Supplement No. 116 Legislative Supplement No. 51) legal notice no. 137, County health facilities and pharmacies, county and sub county hospitals, rural health centres, dispensaries, rural health training and demonstration centers', rehabilitation and maintenance of county health facilities including maintenance of vehicles, medical equipment and machinery were transferred to the 47 counties. Since the transfer of these services, the strategies and structures to manage these devolved health facilities and functions in most counties have not been evaluated. Counties in Kenya have produced different success stories from the health sector. Some counties are better equipped than others while much of the rural areas in most counties continue to face serious challenges (Sihanya, 2013).

From these observations, it can be deduced that devolution of healthcare services has produced some unexpected and unwelcome results thus the need to assess the efficiency of services offered and challenges so far faced (Barker et al, 2014).According to the Kenya Health Policy (2012), healthcare in the devolved system is organized in a four tier system: the community health services, primary care services, county referral services, and national referral services. The community health services comprise of all community- based demand creation activities, that is,

the identification of cases that need to be managed at higher levels of care. The primary care services are comprise of dispensaries, health centres and maternity homes for both public and private providers. The County referral services include hospitals operating in, and managed by a given county and are comprised of the former level four and district hospitals in that county but also include public and private facilities. In this new structure, the county governments are in charge of the first three levels while the national government is then left in charge of the highly specialized national referral services.

These outputs can only be achieved by investing in 7 policy orientations: service delivery systems, health workforce, health infrastructure, health products, health financing, health leadership and health information. Implementation of these policies have been challenging in most Counties in Kenya. Programmes like establishment of functional referral system, human resource for health, use of locally derived natural health products, healthcare subsidies to improve social protection, establishment of model county hospitals, and establishing e-health hubs have not been easy to realize (Ministry of medical services, 2010).However, limited research has been committed to assessing the extent to which the 47 counties in Kenya have complied with these policy orientations.

2.2 Human resource in healthcare sector in Kenya

A study by Muula et al. (2007) on Malawi showed that shortages of essential drugs including vital anti- malarial or antibiotics pervade all levels of care, even in the vicinity of the capital. This excludes anti- retroviral drugs. The reasons for inadequacies in drug procurement, storage and delivery were manifold but includes deficiencies of finances, physical infrastructure (warehousing), staffing and drug quantification. Vaillancourt (2009) argued that even though the devolution of purchasing power to Counties provides more discretion to them, this measure will remain unsuccessful until the procurement processes are able to manage drugs adequately at national level, including quantification of needs and keeping of adequate buffer stock. However, in as much as many donors have called for procurement process to be changed into a (semi-) independent trust, many Counties have expressed dissatisfaction about the length of time the process would take. They have also expressed doubt that procurement process can ever become independent of political interference (Pavignani & Colombo2009).

Human resource component has been a challenge in most counties in Kenya. Even though National Human Resources for Health Strategic Plan (2009 –2012) was formulated prior to devolution, it has not been revised in order to align to the new form of government. The KPMG Devolution report therefore observes that one of the unintended consequences of the devolution of healthcare workers, is that "career structures can suffer, "that is, smaller administrative areas with fewer layers can reduce opportunities for talented people to progress up the career ladder. The report therefore suggests that Health Education Centres and other entities should be supported in their efforts to create or update training. Education should particularly target provision of continuing education opportunities for existing health professionals to support health care delivery efforts.

Alongside the above report of KPMG, Mwangi (2013) asserted that the county government needs to shift the emphasis of health care to the people themselves and their needs, reinforcing and strengthening their own capacity to shape their lives. Health care needs to be delivered close to the people; thus, they should rely on maximum use of both lay and professional health care practitioners. This includes eight essential components: education for the identification and prevention, control of prevailing health challenges, proper food supplies and nutrition; adequate supply of safe water and basic sanitation, maternal and child care, including family planning, immunization against the major infectious diseases, prevention and control of locally endemic diseases, appropriate treatment of common diseases using appropriate technology, promotion of mental, emotional and spiritual health, provision of essential drugs. Human resource development is an important part of rebuilding the health sector but has received relatively little attention in the literature and may be overlooked by decision- makers and donors (Kabene, Orchard, Howard, Soriano, & Leduc, 2006)

2.2.1 Effect of devolution on healthcare workforce

The delivery of public health interventions requires skilled and adequately supported health personnel. The term Human Resources for Health (HRH), according to the World Health Organization (WHO), refers to all people engaged in actions whose primary intent is to enhance health. These people include care givers (doctors, nurses, clinical officers, pharmacists, etc.) to laboratory technicians, managerial personnel and other staff who do not deliver any services to patients directly but are vital to health system functioning (WHO, 2006).

The importance of HRH is based on the fact that delivering health services is what health workers do, supported by evidence of a strong correlation between the density and quality of HRH in a country and population health outcomes. HRH is one of the core building blocks of a health system and has two essential components; Human Resources Development (HRD) and Human Resources Management (HRM). These two components manage the life of a health worker from training to employment and exit from the health workforce. How well these two components are managed determines whether a country has numerically adequate and motivated HRH.

Like most countries in Africa, the shortage of healthcare workers is not unique to Kenya. Indeed, Kenya is one of the countries identified by the WHO as having a "critical shortage" of healthcare workers. The WHO has set a minimum threshold of 23 doctors, nurses and midwives per population of 10000 as necessary for the delivery of essential child and maternal health services (WHO, 2006). Kenya's most recent ratio stands at 13per 10000. This shortage is markedly worse in the rural areas where, as not Edina recent study by Transparency International, under-staffing levels of between 50 and 80 per cent were documented at provincial and rural health facilities (KPMG, 2015).

According to Scheffler, Bruckner and Spetz (2012), assessing the health labour market requires the study of both the demand and the supply sides, and how to match the minimum order to determine shortages (or surpluses) of health workers. The supply of health workers includes the number of qualified health workers willing to work at a given wage rate in the healthcare sector (physicians, nurses and other care providers). Thus, training is a key determinant of this part of the labour market. The number of trained health workers depends on that of training institutions, the number of years of training, the education level, the cost of training, the individual interest in working in that field, the expected probability of getting a job after training, etc. It is linked to the market for training health workers.

The demand for health workers, which is linked to the demand for health care, is measured by the hiring of human resources for health by public and private institutions. Each of these institutions competes, with varying wage rates, budgets, provider payment practices, labour regulations and rules that determine hiring and wage decisions. In general, the higher the wage, the larger the number of available health workers willing to work for the health sector (Scheffler et al., 2012).

Additional considerations including better working conditions, safety and career opportunities, also determine the decision to work in that sector or rather to work in another sector or to migrate. The interaction between the supply and demand for health workers determines the wages and other compensation, the number of health workers employed, the number of hours they work, the geographical location and their employment settings (Scheffler et al., 2012).

2.2.2 Challenges in human resources for health

The Kenya Health Policy 2012–2030, which is anchored on the Constitution, shows the Government's commitment to ensuring that citizens attain the highest possible standards of health by supporting provision of equitable, affordable and quality health and related services at the highest attainable standards to all Kenyans. The policy guides both County and National Governments on the operational priorities they need to focus on in Health. The country's health sector still faces significant human resource shortages, in spite of the investments the government has made over the years since independence and following the devolution of health services (MOH, 2017).

The situation is attributed to the increase in population growth rate which has continued to put pressure on demand for healthcare augmented by the freeze in recruitment of health personnel over time. The Ministry of Health notes that human resource investments need to be designed to address the availability of appropriate and equitably distributed health workers, attraction and retention of required health workers, improving of institutional and health worker performance, and finally training capacity building and development of the health work force (MOH, 2017).

Reports show that more than 5,000 Kenyan trained doctors have emigrated for reasons attributable to poor pay and 3,000 more have left health to join others sectors, leaving 3,440 doctors to serve nearly 46 million Kenyans who undoubtedly depend on national and county hospitals. According to Kenya Medical Practitioners, Pharmacists and Dentists Union (KMPP&DU), the report did not however capture the fact that majority of these doctors had either emigrated or left the health sector after 2013, following the devolution of health services to the county government (Kenya Health Labour Market Assessment Report, 2015).

Many have cited negative effects of devolution including lack of schemes of service at county level

that continue to negatively impact on human resources' practices such as recruitment and retention, promotion, delayed salaries, lack of harmonization of salaries, lack of opportunities for continuous medical education, among others. Measured against the World Health Organization's staffing norms and standards, Kenya has a shortage of 83,000 doctors (Okech & Lelegwe, 2016).

2.3 Access to health care services in Kenya

Universal health coverage ensures that all people use the promotive, preventive, curative, rehabilitative and palliative health services they need, of sufficient quality to be effective, while also ensuring that the use of these services does not expose the user to financial hardship (WHO, 2010). This embodies three related objectives namely: i) equity in access to health services so that those who need the services should get them, not only those who can pay for them; ii) that the quality of health services is good enough to improve the health of those receiving services; and finally iii) financial risk protection which aims at ensuring that the cost of care does not put people at risk of financial hardship (WHO, 2010.)

Approximately 78 per cent of Kenyans live in rural areas, yet a disproportionate share of healthcare facilities are located in urban areas. Those in rural areas often have to travel long distances, often on foot, to seek care. According to the World Bank, the index of access to health services (measuring the share of newborns delivered at a health facility) in Kenya, speaks volumes to this disparity. For example, over eight in ten children born in Kirinyaga County, which is located in the central part of the country, are delivered in a health facility. In Wajir, which is located in one of the most remote and marginalized regions of the country, one child in twenty is born in a health facility (KPMG, 2015)

Financial access to healthcare services is a serious problem in Kenya. While average Total Health Expenditure (THE) per Kenyan at USD 42.2 in 2009/10 was sufficient to buy a basic package of essential health services, there is strong variation around this mean. Out-of- pocket spending was 25% of THE, showing that many Kenyans cannot rely on equitable pre-paid financing mechanisms. In fact, nearly 15% of Kenyans spent more than 40% of non- food expenditure on healthcare. Healthcare is thus a major source of financial distress for Kenyans (MOH: NHA 2009/10).

The small share of the health sector in the Government budget (in 2009/10 only 4.6%) points to a

general under financing of publicly provided services, even though for some services (especially HIV/AIDS and Malaria) some of the gap is made up by spending by development partners (MOH).This is related to the co-existence of several different coverage schemes. The main ones among these are the GOK free-care initiatives at primary healthcare facilities (dispensaries and health centres) and for free maternal care (esp. deliveries) at higher levels, GOK subsidized access for other care at referral levels, the National Hospital Insurance Fund (NHIF), as well as Private Health Insurance (PHI). Some small Community Based Health Insurance also exists. The existing schemes are isolated and are not connected through financial or risk equalization mechanisms (WHO, 2010).

In 2013, the government announced the abolishment of user fees at primary healthcare facilities and introduced free maternal health care services in public health facilities. This initiative may be considered a populist policy meant to enhance access to quality care, especially the poor and other vulnerable groups, since its implementation was technically unattainable. The concern was that at the time, the initiative lacked technical and necessary legal and operational policies. Technical input to inform the policy initiative is necessary; otherwise the intended objectives may remain unattainable (Calhoun, 2018).

For instance, following the policy pronouncement, cases of delays in the disbursement of funds to counties have been common with a few opting for bank overdrafts to meet operational expenses notwithstanding the embedded charges. As noted earlier, a system for financing health services is pivotal in UHC and if not carefully addressed, will negate the realization of UHC. Cases of stock outs of drugs and other medical supplies, poor maintenance of equipment, lack of transport, and medical facilities have continued to be experienced in many public health facilities countrywide (Okech & Lelegwe, 2016).

Access to health services is very unequal and the poor are currently financially excluded from access to many services. Devolution adds to the complexity, as Counties are now expected to finance health service provision for primary and secondary care services from their block grant allocation. Access to publicly provided services (the “free care” and subsidized/“co-payment categories”) therefore depends on the budget allocations at County-level, which further fragments financing of health services and hinders equal access to care (Bultman, 2014).

2.3.1 Improvement on delivery of primary health Services in a devolved health system

According to the Kenya Health Sector Strategic and Investment Plan (KHSSP July 2013- June 2017) access is a measure of the ability of a person/community to receive available services. It is a pre-requisite to high utilization of health services as it brings services closer to the people as well as makes them cheaper. Additionally, access is influenced by geographic, economic and socio-cultural factors such as barriers to care. Poor distribution of facilities, poor public transport, weak referral systems, insufficient community health services and weak collaborations with other service providers have perpetuated poor geographical access to health services (GOK, 2012). There are imbalances in geographical distribution of health facilities in terms of the numbers and types of facilities available. Some areas have disproportionately more facilities than others. Consequently, while the average distance covered to reach the nearest health facility is reasonable (within 5 km for medical services, and 2.5 km for public health services as recommended by WHO), there are under-served areas in the Country, particularly in the Northern Counties of Isiolo, Turkana, Mandera, West Pokot, Marsabit, Samburu, Wajir, and Garissa (Mugo et al, 2018).

Economic access constraints, affordability of health services also hinder access to services. These include low house-hold income, low prioritization of health at household level and low allocation of resources by the state to the health sector. Because of the high level of poverty in Kenya, most households cannot afford to pay for health services. Where there is some household income, health is not given priority (Ghafari, 2014). On its part, the government is required to achieve the commitment in the Abuja Declaration to allocate 15% of government expenditure budget to health. The measures include introduction of the National Health Insurance Fund, review of the cost sharing strategy, promotion of community pre-payment schemes and development of criteria for allocating public funds (Calhoun, 2018).

Socio-cultural barriers associated with low literacy levels, religious beliefs and gender bias hinder access to health services, especially by women, children, and adolescents, the disabled and other vulnerable groups. Recognizing this problem, the government has to make the provision of health services more humane, compassionate and dignified. Targeted measures include ensuring privacy in the course of service delivery, especially for women (WHO, 2010). Several challenges in delivery of primary healthcare services still persist in Kenya. As done by several other low and middle income countries, Kenya can get better value for money by first focusing on making existing primary health

facilities functional to deliver quality health services. While the county fact sheets suggest that over a tenth of the existing primary healthcare facilities are non-functional, the real situation appears to be worse. Further, there is lack of data on functionality of over one thousand primary care facilities built under the Constituency Development Fund (Ghafari, 2014).

The recent policy to offer free maternity services at all public health facilities is a step in the right direction to improve access to skilled care at child birth, which is known to reduce maternal deaths and thereby achievement of MDG4. However, the Service Readiness Assessment Survey 4 suggests wide variation in proportion of health facilities offering basic emergency obstetric care across counties. Basic emergency obstetric care is much easier to offer compared to comprehensive emergency obstetric care which requires specialists, equipment, blood storage and an operation theatre (WHO, 2013).

The recent public expenditure tracking has shown that Kenyan health providers have much better knowledge compared to several other countries in the region. Nearly 80% of health staff could correctly diagnose five common health conditions and are aware how to manage them (WHO, 2013). But, such knowledge is not optimally getting translated into service delivery as only 40% of them were actually offering full treatment. Similarly about a third of health staff are absent on a day of unannounced visit and over 80% of such absences were authorized. However, there was no clear reason for nearly half of the staff on authorized absence. Survey has shown that nearly two thirds of facilities had essential drugs and supply was marginally better among facilities under pull system, generally facilities had better availability of essential medicines for childcare compared to maternal care. However, the pull system seemed to have helped to improve the supply of drugs for maternal care (WHO, 2013). A recent assessment of technical efficiency of health facilities suggests that generally, public primary health centers are more efficient in service delivery, but less than half of the dispensaries need to improve their services.

2.4. Health care financing system

Although Kenya is a frontrunner in the region in terms of economic and technical developments, the country still only has a prepaid healthcare coverage of about 25%. 75% of the Kenyan population does not have any health (insurance) cover and relies fully on out of pocket expenses (GOK, 2016).

A lot can be won by innovative investments in this area. In 2012/13, the public sector accounted for 34% of the Total Health Expenditure (THE); the private sector for 40% and development partners accounted for 26% which has come down from 35% in 2009/10. In the latest national Ministry of Health (MOH) budget development partners accounted for57.1% of the total health budget in FY 2014/15, compared with 59.8% in FY 2013/14 (GOK, 2016).

The Total Health Expenditure has increased in recent years e.g. from KES 234 billion (USD 2,743 million) in 2012/13, up from KES 163 billion (USD 2,155 million) in 2009/10. However, about one third of Total Health Expenditure has been Out of Pocket Payments whereby individuals and households directly paid for their health services or products (PER Health Report, Vol122014).In Kenya "public health expenditure has stagnated and remains low even by regional standards. Public expenditure per capita has stagnated in the range of USD 12, - and accounts for about a quarter of total spending on health which averages to 1.2% of GDP. The sector spending accounts for 6% of total government expenditure and is one of the lowest shares in the EAC region" (World Bank Group, 2014). The 6% of total public healthcare expenditure is far below the 15% as agreed by the Abuja Declaration (GOK, 2016).

Kenya faces several key challenges in health financing. First, access to services for individuals and households is fragmented by coverage scheme, while the poor and vulnerable are largely excluded. Second, the fragmentation of health financing schemes also brings inefficiencies in service provision and investments. Third, a diverse set of challenges exist that are related to health systems and public governance issues; key among these are the lack of an effective quality assurance mechanism and ineffective corporate governance and accountability mechanisms, which has led to a trust-deficit in Kenyan health financing institutions. All areas need to be addressed urgently to make significant progress towards Universal Health Coverage (UHC) (Bultman, 2014).

The Government of Kenya (GOK) has taken measures to increase the share of public health expenditure in primary healthcare and introduced the Health Sector Services Fund (HSSF) to increase the amount of funding for primary healthcare and to ensure a timely flow of resources to the facilities. However, the level 4 and 5 hospitals remain the main drivers of curative expenditure in the sector, due to (costly) specialist services and higher patient flows (about 33% of the total public health expenditure (Kenya Public Expenditure Review, 2014). Public health

services are financed via budget funding, health insurance (mainly NHIF) and user fees, whereby the patients pay out of pocket. The current GOK abolished in 2013 the user fees in the public sector at dispensaries and health centre level for specific groups: Children under 5 years of age, pregnant women, and Orphans and Vulnerable Children (OVC).

Furthermore, the government has provided funding to compensate the facilities for the revenue loss from the limited user fee income. This budget expenditure has increased from KES 700 million (about USD 6.9 million) in 2013/2014 to approximately KES. 1.7 billion (about USD 166 million) in the period 2014/2015 – 2016/2017. The health sector received about 40 per cent of the public funding from county level in the 2012/2013 budget (about KES 54b/ USD 527M), which means that 40% of the national health budget was devolved at that time (World Bank Group, 2014).

Even though the national healthcare budget increased in the year 2013/2014 (and about two thirds of the public health sector budget was devolved to the county), available data suggests that the total public expenditure on health declined that same year, which means that not all the money budgeted for health was actually spent on health. Annual projections from 2013 onwards, based on a 6 month expenditure cycle suggest that the total county expenditure on health can reach KES 42 billion (USD 410 million - including salaries paid to health workers in the county from a national budget) which falls KES 12b (USD 117 million) short of the budget marked for the devolved health sector in the 2012/2013 budget (World Bank Group, 2014).

2.5 Health infrastructure and equipment

According to health management information system (HMIS) data, there are over 5,000 health facilities across the country operated by three owner systems, with the government running 41% of the facilities, non-governmental organizations (NGOs) 15%, and private businesses 43% (MoH, 2014). The government owns most of the hospitals, health centres, and dispensaries, while clinics and nursing homes are entirely in the hands of the private sector. Health facilities are unevenly distributed across the country.

For instance, the best-off Central Kenya has about twice the number of facilities per population as the worst-off provinces (Nyanza and Western). Central, Coast, and Eastern regions have better ratios than the national average. On the other hand, Nyanza has a higher number of hospital beds

and cots per 100,000 population than Central. North Eastern and Eastern regions have the worst ratios of hospital beds and cots per 100,000 population, while Coast has the best (144, 145 and 274, respectively). Because of their relatively small geographical sizes, Nairobi followed by Central has the minimal distance to a health facility (Wamai, 2004)

To realize universal coverage, a strong, efficient, well-run health system is necessary (WHO, 2010). This in turn requires a robust health infrastructure in terms physical infrastructure, medical equipment, communication and ICT, Transportation. Kenya's healthcare provision and implementation infrastructure include the national teaching hospital, provincial hospitals, district and sub-district hospitals, health centres, and dispensaries, as well as a host of other operators within the private, non-governmental, and traditional/informal sectors.

A survey on County Health System Readiness conducted by Health Policy Project, Futures Group (2014) indicated that most counties are less prepared to provide healthcare services under the devolved system. Counties varied widely in the percentage of primary care centres with an antenatal ward (8–85%). The number of operating theatres and ambulances per hospital ranged from 0.09 to 2.33 and from 0.06 to 3.63, respectively. In terms of equipment, all counties had at least one KEPI refrigerator per MCH/FP unit (ranging from 1.13 to 3.87), but there was a lack of CD4 machines in facilities with labs (ranging from 0 to 0.58).

The many years of neglect caused by budgetary insufficiencies has reduced most facilities to a sorry state that requires rehabilitation before a maintenance programme can be instituted. Some of Kenya's health facilities lack adequate premises for priority interventions, such as delivery rooms, maternity, laboratories, theatres, etc. Public health technicians who were trained to maintain physical infrastructure are not used for that purpose. Similarly, because of low budgetary allocations to health, the few available resources have been fully charged to pharmaceutical and non-pharmaceutical commodities. As a result, equipment has not been replaced for a long period, compromising the quality of care provided (GOK, 2005).

2.6 Summary of knowledge gaps

Although devolution of healthcare services could be crucial for any health system to be effective, having the right human resource structures, adequate health care financing, health infrastructure as

well as improved access and delivery of primary health services are believed to have a stronger impact on performance and outcomes in healthcare service delivery in different counties in Kenya before and after devolution. Devolution is premised on the belief that managerial capacity and efficiency is a prerequisite to achieving its goals, but in practice this has turned out differently.

Since 2013 when different counties began to implement national health policies within their units, management of many aspects of healthcare has received low attention, thus creating potential risks to the success of devolution. Even the formulation of strategic plans to guide devolution processes in healthcare do not necessarily guarantee excellent implementation of its expectations unless as Mintzberg, Quinn and Ghosal (1998) observed, unless they are able to address first the past challenges,. The foregoing authors further noted that the mismatch between policies, strategic plans and new expectations can be attributed to several reasons including poor leadership, inadequate resources, unclear accountability structures, poor communication, and poor human resource management. This adds to the need of assessing the performance of healthcare in Kenya under devolved framework based on comparisons with developments before devolution.

Different counties in Kenya have faced unique challenges at different times before and even after devolution and therefore, the different strategies on healthcare both at national level and county level should be continuously examined in order to assess their relevance in providing solutions to the different healthcare challenges. In Kenya, various studies have been done in the field of healthcare under devolved government focusing on different counties and aspects of healthcare. Awuonda (2015) discussed challenges of implementing the social pillar strategy of the Kenya vision 2030 in the devolved health sector in Kisumu County; Githethuki (2015) looked at the influence of devolved governance and performance of the health sector in Kenya and Makonjo (2017) examined the impact of devolution on health care systems in Nairobi county health facilities.

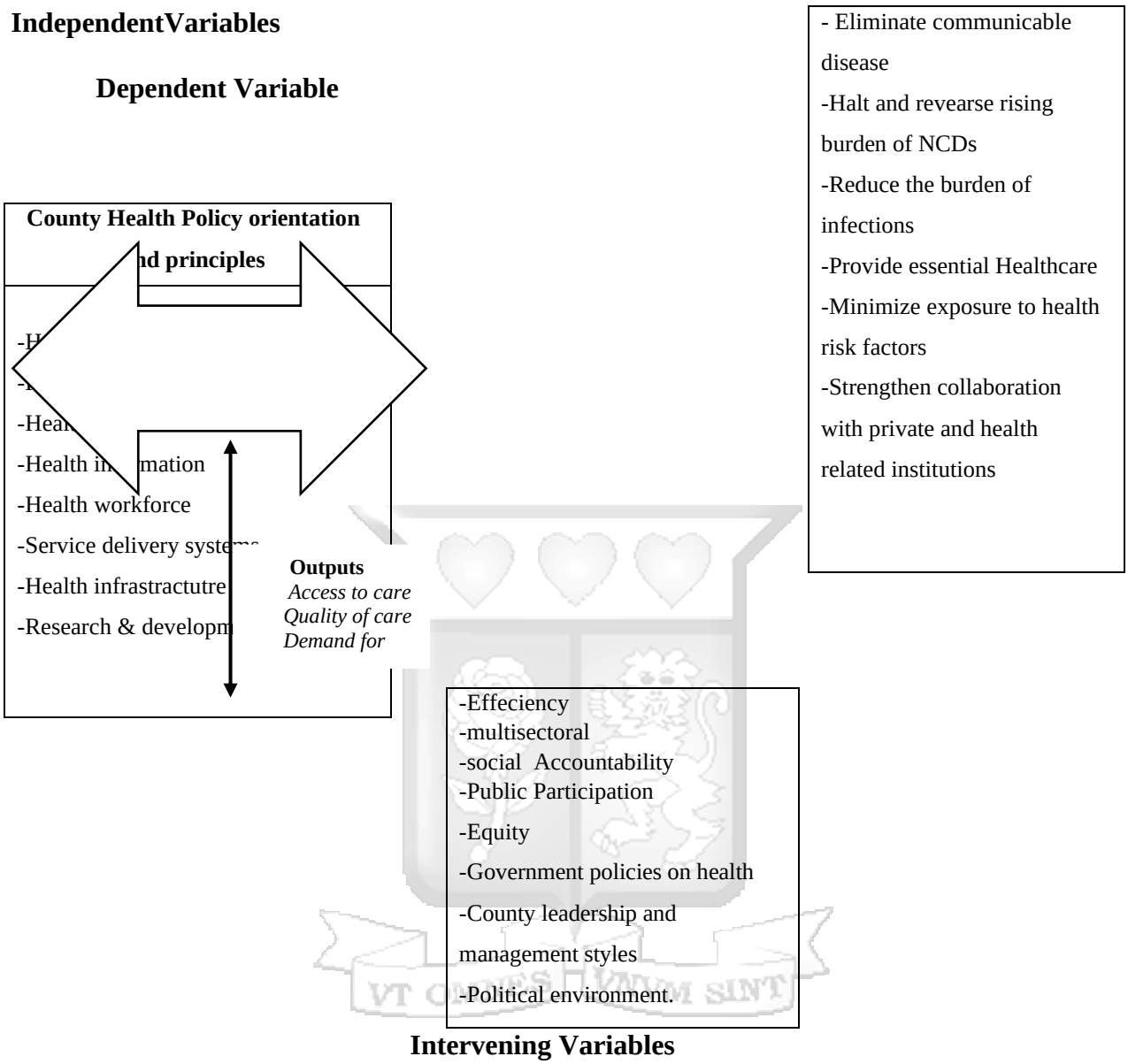
Whereas many of these were case studies like the current study, none of them focused on assessing the performance of health sector in counties in Kenya before and after devolution. Devolution as a form of decentralization of political, administrative and fiscal power to the counties is a fairly new governance strategy in Kenya whose performance can only be assessed effectively by discussing the developments in health sector before its implementation and comparing with developments from 2013. This is because empirical studies on its benefits in other countries have produced mixed results

(Besley & Burgess, 2002; Calamai, 2009).

In Kenya, it has been characterized by lack of experience and understanding, lack of consultation between central and county governments, inadequate budgetary allocations to counties, delayed pay for the health workers, lack of human resource development policy, and poor leadership and management skills by the county executives (CHS, 2014). Whereas this is the overall national picture, there is no specific study done to assess the performance and understand the unique circumstances of individual counties before and during devolution framework, specifically the health sector. This study seeks to establish the reality of this phenomenon under the devolved system of government in Homa Bay County-Kenya.

2.7 CONCEPTUAL FRAMEWORK

Performance of the health sector



2.7.1 Study Variables

The conceptual framework provides the relationship between the study variables. The study variables include, Independent Variable (IV), Dependent Variable (DV) and Intervening Variable (IV).

2.7.2 Dependent Variables

Establishing the influence of devolved governance on the performance of the health sector in Homa Bay County is the primary goal of this study. As such it is the dependent variable. Effective performance of devolved health care is measured in terms of attainment of the highest possible

standard of health in the county in a responsive manner. According to the conceptual framework, the outputs should include: elimination of communicable diseases, halting and revearsing rising burden of Non-Communicable Diseases (NCDs), reducing the burden of infections, providing essential Healthcare, minimizing exposure to health risk factors and strengthening collaboration with private and health related institutions.

2.7.3 Independent Variable

The influencing factors which forms the independent variables of the study include, Health Financing, Health Leadership, Health Products & Technologies, Health Information, Health Workforce, Service Delivery Systems, Health Infrustructure, Research & Development. These variables apply in different ways to the specific objectives of this study (level of access of health services, human resource management, healthcare infrastructure and funding and expenditure). Their significance determines health sectors performance in Homa Bay County, Kenya.

2.7.4 Intervening Variables

In this study the intervening variables were: Public Participation, People-centered, Equity Effeciency, Multisectoral (NGO's and International Health Agencies), Social Accountability, New Government policies on health, County leadership and management styles and political environment.

From the conceptual frame work, the health sector cannot be able to effectively deliver the expected services if the levels of access of health care services remain low, human resource management is poor, healthcare infrastructure are in poor shape, funding and expenditure is irregular, devolved procurement processes are unclear and linked with corruption, as well as when devolved policy and regulatory framework are are not supported by legislations.

When finances are not received on time by counties and if the level of financing received by the county is insufficient to help in delivery of qualified healthcare services in county and sub-county hospitals then the performance of the sector will be compromised. Available reports show that financial access to health care services is still a serious problem in Kenya. For instance in P4H report of 2014, it was noted that, while average total health expenditure per Kenyan was estimated at USD 42.2 in 2009/10 considered sufficient to buy a basic package of essential health services, there is strong variation (P4H, 2014).

Devolution of finances influence rehabilitation and improvement of County and Sub-County Hospitals. Funding also influences the type of services that primary care facilities offer (GoK, 2015). There is limited investment in maintenance of physical infrastructure although investments in medical equipment are ongoing in selected hospitals.

When health institutions are inadequately staffed such that hospitals have very few medical doctors, the performance of the health sector in the county is affected. Deployment issues relating to healthcare workers remain contentious in post devolution particularly on hiring, training and capacity building. This agrees with WHO findings that the shortage of healthcare workers is not unique to Kenya. Indeed, Kenya is one of the countries identified by the WHO as having a "critical shortage" of healthcare workers. The MoH (2015) concludes that Kenya's health sector still faces significant human resource shortages, in spite of the investments the government has made over the years since independent and following the devolution of health services.

The performance of health sector in the county could also be influenced by other intervening factors like leadership of the Hospital and the entire county. Participatory or democratic leadership style allows everyone to contribute according to their own potential, and allowing people to act accordingly without any fixed mindset. This therefore calls for a strong leadership attributes that creates an atmosphere of trust. An atmosphere of trust creats positive employee engagement and minimizes a negative personality influence. Effective leadership creates positive team environments.

The MOH is responsible for guiding and regulating the health sector in Kenya. Besides this, the MOH is also in charge of the overall (national-level) management of public health services in the country. The PS is the final-responsible for the Internal Audit of the MOH, Semi-Autonomous Government Agencies (SAGAs) and Parastatals. Furthermore, the PS leads the Department of Administrative Services (which includes: General Administration, ICT, HR, etc.). The DMS is in charge of the provision of all medical services which means he/she oversees the Regulatory Bodies, and all the departments that ensure that health services in Kenya are provided (e.g. Standards & Quality, Preventive and Promotive Health, Curative and Rehabilitation Health Services, Policy, Planning and Health Financing, Coordination and Inter-government).

Support from other health institutions like AMREF and CDC in terms of of provision of drugs and training contributes to improved performance of health sector. In addition, the ministries of health

vision and plans for the future have direct implications on health programs in counties. Similarly, county development policies and visions do affect the performance of health sector as such county administration has a duty to create and agree on a vision that binds the members of the heath sector together, clarifies its ideals, invites commitment and provides momentum.

CHAPTER THREE
RESEARCH METHODOLOGY

3.1 Introduction

This study was guided by the general objective of assessing the effects of devolution on delivery of healthcare services in Homa Bay County-Kenya. This chapter is a presentation of the research methodology that was used to gather data and information about the stated research objectives. It includes topical issues such as: the research design; target population, sampling design and procedures; research instruments for data collection; the research process; validity and reliability of the research instruments as well as data processing and analysis techniques.

3.2 Research design

Silverman (2011) defined the research design as the master plan that is used in a study in order to answer the research questions. Orodho and Njeru (2003) also defined research design as a scheme, outline or plan that is used to generate answers to research problems. It constitutes the blue print for the collection, measurement and analysis of data. This study used a descriptive survey design in assessing the effects of devolution on delivery of healthcare services in Homa Bay County-Kenya. Descriptive studies are reliable for collecting information that can demonstrate relationships and describe the world as it exists. Silverman (2011) suggested that descriptive studies answer questions such as "what is" or "what was." According to Sekaran and Bougie (2010) a survey is a method that studies large population (universe) by selecting and studying the samples from the population in order to discover the relative incidence, distribution and interrelations of variables used in the study. The survey method was applied to gather information from respondents from different Sub-counties in Homa Bay County.

3.3 Study area

Administratively, Homa Bay County is divided into six sub-counties, 19 divisions, 116 locations and 226 sub locations. Ndhiwa sub-county has the highest number of divisions (6) and locations while Rachuonyo North has the highest number of sub-locations (58). Suba sub- County has the lowest number of locations (9) and sub-locations (24) owing to its low population density.

Table 3.1: Area and administrative units by districts

Districts	Area	Divisions	No. of	No. Of Sub-
RachuonyoSouth	509.5	2	23	39
RachuonyoNorth	441.2	2	23	58
HomaBay	458.5	4	21	28
Ndhiwa	711.4	6	29	50
Mbita	420.8	3	11	27
Suba	641.8	2	9	24
Total		19	116	226

Source: County Commissioner's Office, Homa Bay (2013)

Based on projections from the 2009 Kenya Population and Housing Census, Homa Bay County has an estimated population of 1,038,858 persons consisting of 498,472males and 540,386 females by the end of the year 2012. This population is projected to rise to 1,177,181 persons in 2017. Of this total, 564,843 will be males while 612,338 will be females.

3.4 Target population

The study was undertaken on level four hospitals in Homa Bay County in the six sub-counties- Rachuonyo South, Rachuonyo North North, Homa Bay, Ndhiwa, Mbita and Suba. The study population therefore included, 40 Ward Administrators representing 40 wards in the county, 3 Senior Health Officers in the county, heads of each of the sub-county hospitals and 90 nurses.

Table 3.2: Target population for interviews/ interview schedule

Sub-county Hospitals	CSO-Health.	**Nurses**	Med-Superintendent	CES-Health	CO-Health	**Ward Admins per constituency**	
Rachuonyo South		10	1			Kasipul	5
Rachuonyo North		10	1			Kabondo Kasipul	4
Homabay Town	1	10	1	1	1	Karachuonyo	7
Ndiwa		10	1			Rangwe	4
Mbita		10	1			Homabay Town	4
Sindo		10	1			Sindo	2
Suba		10	1			Ndiwa	7
Rangwe		10	1			Mbita	5
Kendu- Bay		10	1			Suba	4
TOTAL	**1**	**90**	**9**	**1**	**1**		**42**

3.5 Sampling procedures and sample size

Stratified sampling was used in this research. It is a method of sampling that involves the division of a population into smaller groups known as strata based on members' shared attributes or characteristics. Purposive sampling was used to select key informants from each stratum. County health officers to be selected for key informant interviews included: Homa Bay County Executive Secretary for Health, the Chief Officer of Health, and the County Director of Health.

Additionally, those in charge of each of the sub-county hospitals in the six Sub-counties, as well as nurses were selected for key informant interviews. These included the Chief Executive Officer of Homa Bay County Referral Hospital, the Medical Superintendents in charge of Rangwe Sub-County Hospital, Kendu Bay Sub-County Hospital, Sindo Sub-County Hospital, Mbita Sub-County Hospital and Ndhiwa Sub-County Hospital. A total of 42 Ward administrators from the eight constituencies were also sampled for interviews. However, the final list of respondents were as indicated in table 3.3

Table 3.3: List of Respondents

Sub-county Hospitals	CD-Health.	**Nurses**	Med Superintendent	CES-Health	CO-Health	**Ward Admins per constituency**	
Rachuonyo South		7	1			Kasipul	3
Rachuonyo North		5	1			Kabondo Kasipul	3
Homabay Town	-	10	1	-	-	Karachuonyo	3
Ndiwa		7	1			Rangwe	2
Mbita		6	1			Homabay Town	4
Sindo		6	1			Sindo	2
Suba		5	1			Ndiwa	2
Rangwe		5	1			Mbita	3
Kendu- Bay		7	1			Suba	4
TOTAL	**0**	**58**	**9**	**0**	**0**		**26**

Source: Research Data (2018)

3.6 Data collection procedure

In this study, both primary and secondary data were collected. Primary data was collected through interview guides. The interview guides were developed after a review of literature on the effects of devolution on delivery of healthcare services in Kenya and in line with the Kenya Health Sector Strategic and investment Plan (KHSSP 2013-2017) aspirations. The instrument contained questions touching on leadership, human resource, health infrastructure, procurement, change management, organization structure, and power and politics. For each question asked on, effects of devolution on delivery of healthcare services in Homa Bay County- Kenya, a corresponding question was also asked on the measures being taken to address those challenges.

Interview guides were used to ensure that crucial data was not left out during the discussions. The interview guides reflected the study objectives and research questions that the study sought to answer. Those who were interviewed at the county headquarters include the Homa Bay County Executive Secretary for Health, the Chief Officer of Health, and the County Director of Health. Additionally, those in charge of the two major health facilities in the county, that is, the Chief Executive Officer of Homa Bay County Referral Hospital and the Medical Superintendent in charge of Rangwe Sub-County Hospital, Kendu Bay Sub-County Hospital, Sindo Sub-County Hospital, Mbita Sub-County Hospital and Ndhiwa Sub-County Hospital were also interviewed.

Secondary data was collected through a scrutiny of minutes of meetings, financial reports, the Fiscal Strategy Paper, County Integrated Development Plans, the Homa Bay County Health Sector Strategic and investment Plan 2013 -2017, and the strategic plans of Homa Bay County Referral Hospital and of the five sub-county hospitals. Also, any signed communications on the notice boards, whether as a notice or a memo, was also scrutinized for their relevance to this study.

3.6.1 Reliability

According to Sekaran and Bougie (2010), reliability is a measure of the degree to which a research instrument yields consistent results or data after repeated trials. An instrument is reliable when it can measure a variable accurately and consistently, and obtain the same results under the same conditions

over time. Cronbach's Alpha method was used: it is mathematically equivalent to the average of all possible split-half estimates. In this case, the researcher calculates all split-half estimates from the same sample. Because it measured the entire sample on each of the items, computer analysis was used to provide the random subsets of items and the resulting correlations computed.

3.6.2 Validity

Validity on the other hand refers to the degree to which results obtained from the analysis of the data actually represent the phenomenon under study (Franklin, 2012). It is the degree to which a research tool measures what it purports to be measuring. This is to help the researcher in identifying items in the research instrument that may not elicit the relevant information. Modification of such items was made to ensure the research tools elicited the anticipated data. Formative validity was applied, which is used to assess how well a measure is able to provide information to help improve the program under study.

3.7 Data processing and analysis

The data collected from the in depth interviews was qualitative in nature and was subjected to content analysis. Nachiamis and Nachiamis (1996) defined content analysis as the technique for making inferences by systematically and objectively identifying specified characteristics of the messages and using the same approach to relate to trends. It is the use of replicable and valid methods for making specific inferences from text to other states or properties of its source.

Content analysis was important for making replicable and valid inferences from data to their context, with the purpose of providing knowledge, new insights, a representation of facts and a practical guide to action. The aim was to attain a condensed and broad description of the phenomenon, and the outcome of the analysis was concepts or categories describing the phenomenon. A category is a group of words with similar meanings or connotations. According to Weber (1990) categories must be mutually exclusive and exhaustive. These categories were used to build up a model, conceptual system, or a conceptual map.

Both the primary and secondary qualitative data collected during this study was grouped into major categories based on the objectives of the study and included: procurement processes of medical materials, human resource management, healthcare infrastructure and strategies and regulatory

framework used in enhancing performance of the health sector in Homa Bay County in Kenya. These major themes had been derived from the literature review of empirical studies on effects of devolution on delivery of healthcare services in Kenya. Under these major themes/objectives, sub-themes were developed, checked and edited for completeness and consistency throughout the study. This deductive content analysis enabled the researcher to analyze and interpret meanings of the categories while also seeking to understand the interviewees' perceptions and beliefs concerning the effects of devolution on delivery of healthcare services in Homa Bay County. Other researchers who have used content analysis in their studies include Nyororo (2006) and Mwangi (2013). Nyororo (2006) argued that content analysis is scientific since the data collected can be developed and be verified through systematic analysis.

3.8 Ethical considerations

The issue of ethics is very important because despite the high value of knowledge gained through research, knowledge cannot be pursued at the expense of the human dignity (Hirano & Yamazaki, 2010). Hirano and Yamazaki categorised ethical issues into four classifications, which are protection from harm, right of privacy, informed consent and professional honesty with colleagues. In addition, Kumar (2005) took the issue of informed consent further, by arguing that it is unethical to collect data devoid of the knowledge of the subjects, and their expressed willingness and informed consent to take part in a study.

In social science studies, anonymity and confidentiality are essential ethical concerns taken into account. It is important for the researcher to protect the identity of individual's information and ensure that data collected is reported honestly and source of information is not disclosed, except where the respondent has given his or her communicated permission to carry out field research in the University, NASCOP, Ministry of Higher Education. The study respected each individual`s right to privacy. Respondents were assured that the information they provided would be treated confidentially. Statements of confidentiality were developed and verbally communicated during the administration of instruments. Ethical approval was also sought and granted by the Strathmore University Institutional Review Board.

CHAPTER FOUR
DATA ANALYSIS, RESULTS & DISCUSSION

4.1 Introduction

This chapter presents the analysis of findings from the in-depth interviews and documentary reviews in line with the study objectives namely: to determine level of access of health services in Homa Bay County before and after devolution in Kenya; establish the status of human resource management in the health sector in Homa Bay County before and after devolution in Kenya; evaluate healthcare infrastructure in Homa Bay County before and after devolution in Kenya and assess funding and expenditure in health care in Homa Bay County before and after devolution in Kenya.

Primary data collection targeted Homa Bay County Executive Secretary for Health, the Chief Officer of Health, and the County Director of Health. Additionally, those in charge of each of the sub-county hospitals in the six Sub-counties were also targeted. They included, the Chief Executive Officer of Homa Bay County Referral Hospital, the Medical Superintendents in charge of Rangwe Sub-County Hospital, Kendu Bay Sub-County Hospital, Sindo Sub-County Hospital, Mbita Sub-County Hospital and Ndhiwa Sub-County Hospital. A total of 42 Ward administrators from the eight constituencies were also targeted for interviews. Interviews were recorded in a notebook which was later subjected to content analysis. Secondary data was gathered through documentary reviews of the minutes of meetings, Homa Bay County Integrated Development Plan 2013-2017, Homa Bay County Fiscal Strategy Paper (2015), Homa Bay County Health Sector Strategic and Investment Plan 2013-2017, the Homa Bay County Referral Hospital strategic plan and notices and memos on the notice boards.

4.2 Response rate

142 respondents from different levels of the health sector and wards were targeted for interviews. However, only nurses and Medical Superintendents of ten hospitals in Homa Bay County were interviewed. The hospitals were, Ogogo, Rangwe, Kendu Bay, Simbi Kogembo, Kaumo, Kimonge, Makongeni, Mbita, Rachuonyo and Suba. All the 9 Medical Superintendent Officers serving in the sub-county hospitals were interviewed of which 3 were women and 6 were men. The three County Executive officers that were targeted were not interviewed because of their busy schedule to respond

to the interviews. The three officers were; County Executive Secretary for Health; Chief Officer of Health and County Director of Health.

From the list of 90 nurses interviewed in the entire county, only 58 responded to the interviews of which 36 were women and 22 men. Only 26 out of 42 Ward administrators that were targeted were interviewed. From this sample, there were 16 men and 10 women. In total, 93 respondents were given questionnaire and were able to respond by completing and returning the questionnaire. This gave a response rate of 65.5%. The collected data were edited and coded. Data analysis of the responses was done using frequency, percentages, mean score and standard deviation. Presentations were done in form of pie charts, bar graphs and tables.

Table 4.1: Response rate

Sub-county Hospitals	CD-Health.	**Nurses**	Med Superintendent	CES-Health	CO-Health	**Ward Admins per constituency**	
Rachuonyo South		7	1			Kasipul	3
Rachuonyo North		5	1			Kabondo Kasipul	3
Homabay Town	-	10	1	-	-	Karachuonyo	3
Ndiwa		7	1			Rangwe	2
Mbita		6	1			Homabay Town	4
Sindo		6	1			Sindo	2
Suba		5	1			Ndiwa	2
Rangwe		5	1			Mbita	3
Kendu- Bay		7	1			Suba	4
TOTAL	**0**	**58**	**9**	**0**	**0**		**26**

Source: Research Data (2018)

4.2 Demographic data

The study sought to determine the health and administrative officers involved in healthcare in Homa Bay County, gender of the respondents, age, level of education, work experience with current employer and position in the organization. The results of the study are presented in the next sections.

4.2.1 Gender distribution of respondents

Respondents were asked to indicate their genders. According to the findings presented in Figure 4.2, majority of the respondents (49) (53%) were women while (44) 47% were male. This may be interpreted to mean that there are more women than men working in the health sector in Homa Bay County. The gender distribution of the respondents was 53% female and 47% male as such there was an equitable distribution of the respondents and this reduced the effects of biased responses based on gender, an important ethical consideration in social sciences

Table 4.2: Distribution of respondents by gender

	Frequency	**Male**	**Female**
Medical Superintendent	9	6	3
Nurses	58	22	36
Ward Administrators	26	16	10

Source: Research Data (2018)

4.2.2 Age distribution of respondents

Respondents were asked to indicate their ages and according to findings in Figure 4.3, 46 respondents (49%) were aged between 41 and 50 years while (31) 33% of the respondents were aged between 31 and 40 years and (17) 18% was 51 to 60 years. The results show that there were no youthful respondents as no respondent was aged below 30 years. This could be attributed to the fact that these were heads of departments.

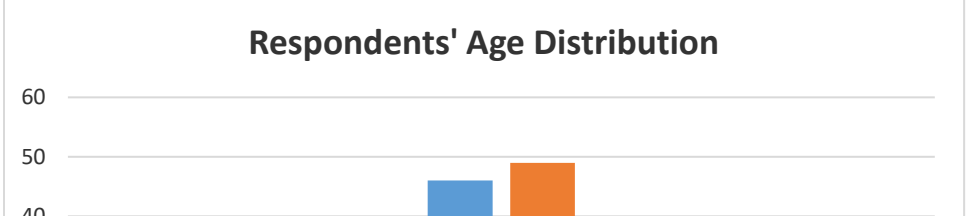


Figure 4.1: Respondents' age distribution

Figure 4.1: Respondents' age distribution

4.2.3 Respondents level of education

The education levels of the respondents were cited to be certificate by (19) 20%, diploma (45) 48% of the respondents, university (20) 22 % respectively and post graduate by (9) 10% of the respondents. This should commendable academic standing that enabled the respondents to comprehend and provide reliable information for the study.

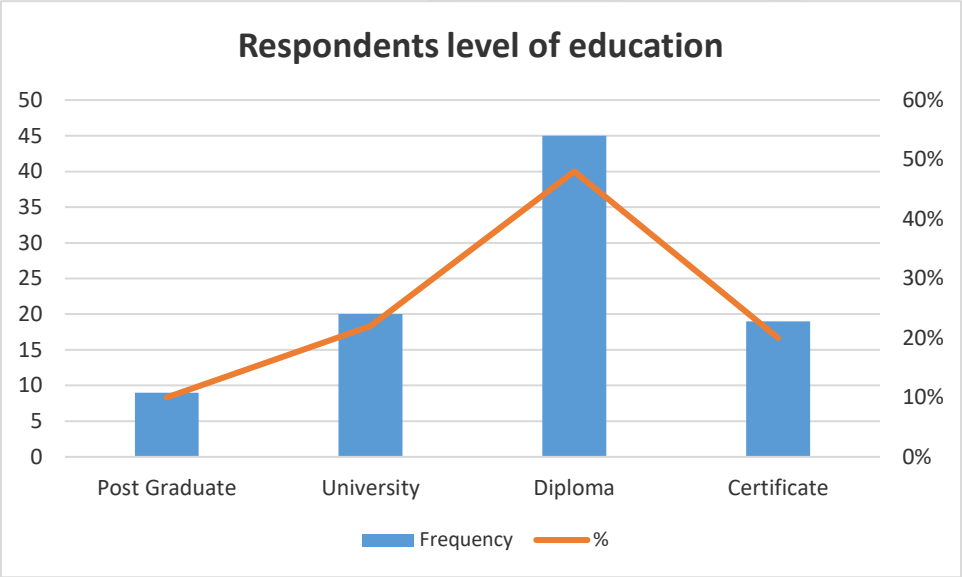


Figure 4.2: Respondents' level of education

4.2.4 Work experience

Respondents were asked to indicate how long they have worked with the current employers. According to the findings of the study presented in Figure 4.5, most of the respondents 41 (44%) have worked in healthcare sector and in their stations for between six and ten years while 11(12%) have worked for between 1 and 15 years and (13) 14% for over 15 years. This may be interpreted that the rate of staff turnover in the organization is very low considering that most staff have been with the organizations for more than 5 years.

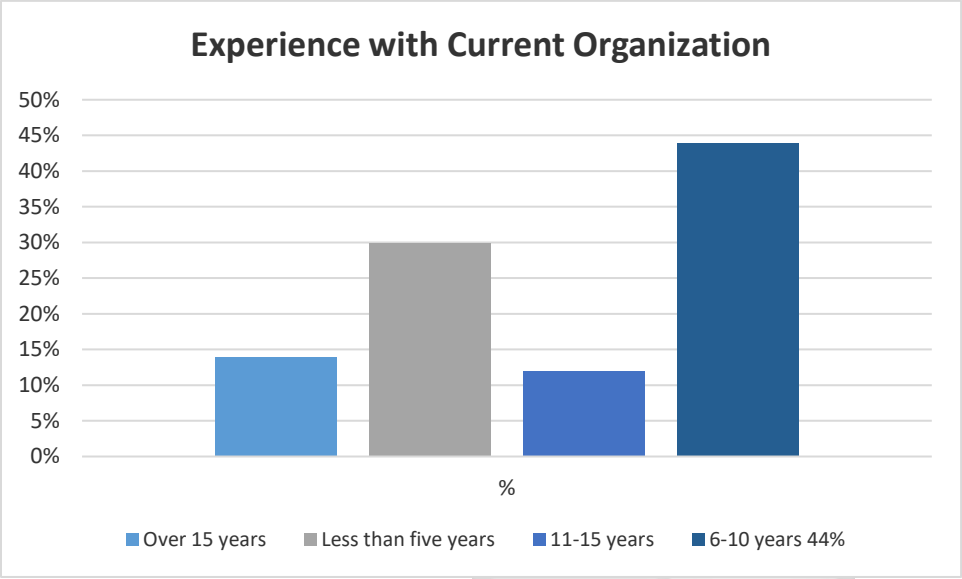


Figure 4.3: Experience with current organization

The respondents were asked to indicate the positions they held in the healthcare sector in their respective hospitals. The results in Figure 4.5 show that 52% of the respondents were Nurses managers while 10 % were senior managers in the departments. The results show that 10 % of the respondents were technical officers and 28% are support staff.

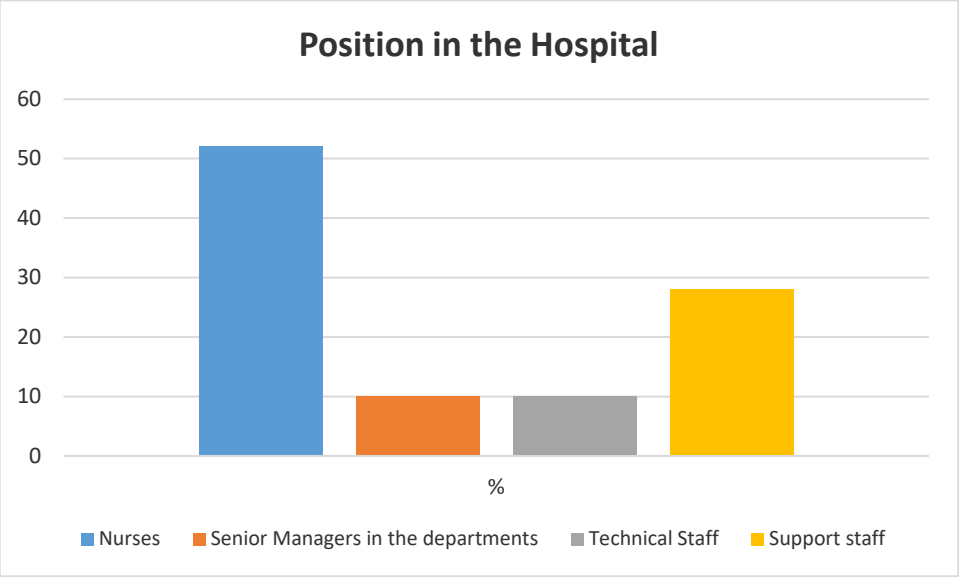


Figure 4.4: Position in the hospital

4.3 Rating of the performance of Sub-county hospitals in respondent's area

The rating of the performance of the Sub-County hospitals in respondents' area was average by 61.8%, low by 27.2%, high by 9% and very low by 2%. As such, the Sub-County hospitals did not have high performance, a factor influencing the performance level of the overall health sector in Homa Bay County. The satisfaction level of the respondents on the quality of service delivery in the Sub-County hospitals was rated average by 56.4% of the respondents, low by 36.4% and very low by 7.2% of the respondents. Thus, the hospitals were not providing adequate services to meet the needs of the patients, a factor influencing low performance rating by the public.

The study sought to establish whether health services had improved since the implementation of devolved governance. Accordingly, 73% of the respondents agreed, 9% strongly disagreeing while 13% agreed and 5% strongly agreed. As such, there has been a significant improvement of the health services in Homa Bay County after devolution. Devolution of the procurement process has enhanced access to drugs, equipment in Sub-County hospitals, 74.5% of the respondents disagreed, 20% agreed and 5.5 % strongly agreed. Thus access to drugs had not improved after implementation of devolved procurement.

However, devolved procurement process has not reduced the instances of corruption in health facilities in the county, 47% of the respondents agreed, 31% disagreed, 18% were neutral while 4%

strongly agreed. As such there was some significant improvement in curbing corruption in the procurement process, through devolution county and sub-county hospitals. Respondents indicated that weak public scrutiny of the procurement process in County and Sub-County hospitals is responsible for unending corruption. Accordingly, 18% agreed, 29% strongly agreed while 53% of the respondents disagreed on the level of scrutiny of procurement processes in health sector in Homa Bay County. This showed that devolution has not fully empowered the community to monitor the procurement process in hospital facilities in the county a factor undermining health sector performance.

The extent to which the new management under devolution has enabled quicker decision making by the sub-county hospital leaders was cited to be much by 56% of the respondents, very much by 35% and moderate by 9%. Thus, quicker decision making has been enabled through devolution, an important factor for strategic change at the hospitals. The influence of devolved leadership on hospital development planning was rated as very high by 73% and high by 27% of the respondents. As such, devolved leadership had a significant and positive influence on hospital development planning.

4.4 The status of human resource management in the health sector in Homa Bay

In this section the study sought to determine the challenges facing the human resource status in selected Sub-County hospitals in Homa Bay County. This was tested on an a five point Likert scale of 'very great', 'great', 'moderate', 'small' and 'not at all'. The findings of the Study are presented in the subsequent sections. It analyses the current state of human resource looking at parameters: number of staffs in the facility, learning and development activities, staff appraisals, staff motivation and promotions. It also seeks to answer if devolution has had an impact in the human resource status using the outlined parameters above. The last analysis is to find out what working situation needs to be changed according to the staff. Half of the facilities (50%) have more than 15 staff attached to the facility but still 90% of the facilities feel they are inadequately staffed.

The respondents were asked to indicate the extent to which they agreed with the statements regarding the general challenges facing their hospitals. The findings of the study show that all the respondents (mean score 4.42) agreed to a great extent that there were many expectations from potential

employees of the hospitals. The results further show that most of the respondents (51%, mean score 3.56) agreed to great extent that the changing competitive demands in the job market had affected the health sectors' management of human resource. Thus doctors' population ratio stands at 1:40,000 and the nurse population ratio was 1:1,500. This causes difficulties in providing effective health service in the county.

While 30% of the respondents agreed to great extent that due to nationalization of the job market, potential candidates for employment in their organizations appeared to opt for assignment elsewhere, 37% agreed with this statement only to a small extent. Most of the respondents (44%, mean score 3.16) agreed to moderate extent that planning for the right positions and the right people to fill the vacant positions was a challenge in their hospitals. However, according to 35% of the respondents, the planning to fill the positions was a great challenge. The study also revealed that according to 75% (mean score 4.16) of the respondents agreed to great extent that there was limited willingness of competent staff to work in hardship field stations.

A large proportion 6 (70%) of the facilities expressed that they have staff appraisals against 3 (30%) that don't. The most common mechanism for staff motivation was tea for staff while 30% of the facilities noted that there were no mechanisms for motivation whatsoever. 70% (6) of the facilities offer staff promotions and the most common basis used for promotion is academic qualifications. For facilities that offer their staff continuous educational activities, the most common activities revolve around family planning and management, malaria, PPH (post-partum hemorrhage) and HIV. Additionally, 86 % of the medical personnel categories had less than 10 personnel per 100,000 population in the County. This is according to the KNBS County Statistical Abstract, Homabay County (2015)

The staff in these facilities felt that the most pressing needs that need to be improved from a human resource perspective are: providing more supplies and stock (30%) and creation of more staff training opportunities. Looking at the impact of devolution on the human resource status, it is observed that promotions, medical educational activities and staff motivation existed before devolution and that they did not start as a result of the introduction of devolution. According to 2013-2017 intergraded plan, the county projected to construct staff houses at a cost of 200 million between 2010-2017 from

donor funding and Government of Kenya. The report indicated that the project was ongoing, even though this was not the case.

The findings of the study show that all the respondents (mean score 4.42) agreed to a great extent that there were many expectations from potential employees to the organization. The results further show that most of the respondents (51%, mean score 3.56) agreed to great extent that the changing competitive demands in the job market had affected the organizations' management of human resource. While 30% of the respondents agreed to a great extent that due to internationalization of the job market, potential candidates for employment in their organizations appeared to opt for assignment elsewhere, 37% agreed with this statement only to a small extent.

Most of the respondents (44%, mean score 3.16) agreed to moderate extent that planning for the right positions and the right people to fill the vacant positions was a challenge in their organization. However, according to 35% of the respondents, the planning to fill the positions was a great challenge. The study also revealed that 75% (mean score 4.16) of the respondents agreed to great extent that there was limited willingness of competent staff to work in hardship field stations.

4.4.1 Recruitment and selection

The study sought to establish the recruitment and selection challenges faced by the human resource management of the Sub-County hospitals. The findings show that most of the respondents (68%, mean score 3.84) agreed to a great extent that attracting the right people to apply for job openings was a major challenge to the organizations. The results show that 51% of the respondents (mean score 3.37) agreed to a great extent that the growing dimension to recruit regionally was a challenge.

The results of the study show that most of the respondents (47%) agreed to a small extent that reduced number of potential employees with requisite competence was a challenge while 42% agree to great extent that it was a challenge. The study results show that 68% of the respondents agreed to great extent that inadequate budget earmarked to human resources was a challenge to the management of human resource in county and sub-county hospitals. The results show that 30% of the respondent agreed to great extent that lack of a central repository (database) to capture employee skills and capabilities was a challenge. The results of the study could be interpreted to mean that recruitment

and selection was a major challenge to the human resource management in most Sub-County hospitals.

4.2.2 Training and development challenges

The study sought to establish the training and development challenges faced by the human resource management of the county and sub-county. The performance level of the staff at the county and sub-county hospitals was rated low by 55% of the respondents, average by 22% and high by 14%. This showed generally low performance levels and this has a poor influence on the performance of the health sector. The findings also show that 79% (mean score 4.05) of the respondents agreed to great extent that the high cost of training was a challenge. The results further show that most of the respondents (49%, mean score 3.42) agreed to great extent that high rate of staff turnover was a challenge to the organizations while 30% indicated that high employee turnover was a challenge only to moderate extent. The results show that 73% of the respondents agreed to great extent that limited donor support for training and staff development was a challenge to the organizations human resource management.

The study findings revealed that according to 74% (mean score 4.09) of the respondents 'poaching' of trained employees by other organizations was to a great extent a challenge to the human resource management. However, the results show that according to 49% of the respondents, lack of competent human resource trainers to train and develop staff was a challenge to the management of human resource only to moderate extent. The findings of the study may be interpreted to mean that inadequate training and development in the county and sub-county hospitals was a major challenge in the management of human resource in health facilities.

4.4.3 Employee retention and exit

The study sought to determine that employee retention challenges that faced the county health facilities. The study results show that most respondents (42%, mean score 3.33) agreed to moderate extent that limited staff welfare and mediation programmes was a challenge, while 44% (mean score 3.58) agreed to moderate extent that lack of trust between senior managers and staff was a challenge. The results show that 65% (mean score 3.74) agreed to great extent that the high cost of retirement benefit was a challenge. The results show that 33% of the respondents agreed to very great extent

that the rotational policy has led to lack of continuity of certain programmes while 56% (mean score 3.26) agreed to great extent that separation costs in hardship duty stations are high due to high staff turnover. The findings of the study may be interpreted to mean that the employee exit was to a large extent a challenge to the hospitals in the county.

4.4.5 Health and safety

The study sought to establish the health and safety challenges facing health institutions in the county. The findings show that 42% of the respondents agreed to a great extent that lack of adequate medical facilities in upcountry field stations was a challenge to the health and safety management in the organizations. Respondents also indicated that inability to manage occupation health programmes for staff was not a major challenge to the organization. Access to medical drugs and facilities at the county hospitals was cited as insufficient by 51% of the respondents, fairly sufficient by 29%, sufficient by 13% and highly insufficient by 7% of the respondents. As such, there was generally low access to drugs and facilities at the hospitals, a factor depicting low performance levels in the health sector. From the findings, it is clear that insecurity was the major challenge that the organizations faced in the management of health and safety.

4.5 Healthcare Infrastructure in Homa Bay County before and after devolution in Kenya

This analysis tries to answer the current state of infrastructure in the facilities and as well answers whether devolution has had an impact on the improvement of facility infrastructure which is a key objective of this study. The study revealed that not all the departments used ICT in provision of healthcare services in as much as 100% of all the respondents agreed that use of ICT made service delivery faster and better. The study established that the few departments that used ICT, computers were the most commonly used. A limited number of departments also used Laptops.

From the study results, 70.9% of the respondents indicated that they were satisfied with the variety of services provided by the information technology in hospital. 40.7% of the respondents indicated that they were satisfied with the quality and reliability of services provided by the information technology in the hospital however, 40 % of the respondents showed that insufficient internet bandwidth or speed partially affected the provision of healthcare service. The study found out that the health sector has achieved considerable outcomes as per its mandate: reduction of Under Five

Mortality from 115 per 1,000 live births in 2003 to 74 per 1,000 live births in 2017/8 and Infant Mortality from 77 per 1000 live births to 52 per 1000 live births in the same period. As a consequence, 44.2% of the respondents moderately agreed that waiting time required to serve client has reduced in most hospitals in Homa Bay County since devolution of government service delivery. Also 37.2% of the respondents moderately agreed that devolution of government service delivery has increased access to healthcare services in terms of availability, affordability, accessibility and acceptability.

About 90% of the respondents believe cleanliness of toilets have improved and 90% of facilities have a protected placenta pit. Majority of the facilities (70%) dispose sharp waste by burning in an incinerator. The most common source of water for the facilities is rain water (50%) and piped water (40%). 90% of the facilities do not have a designated unit for repair of equipment. For offering of basic emergency obstetric care and free maternity services the percentages stand at 90% and 100% respectively. A large chunk of facilities has a labour ward (90%) and 70% offer inpatient care. However, while inpatient care is offered in most facilities, half of the facilities have 50 or less inpatient beds available. For facilities with a laboratory, 35% of respondents felt the lab was in a bad condition. Additionally, the top 3 sub counties in terms of hospital beds are Homa Bay (527), Rachuonyo North (361) and Rachuonyo South (331). These contributed to 77% of the total number of hospital beds in the county, KNBS County Statistical Abstract, Homa Bay County (2015).

Table 4.4: Hospital beds per Sub County

Sub-county	Bed capacity
Homa Bay	527
Rachuonyo south	331
Rachuonyo North	361
Ndhiwa	114
Mbita	122
Suba	133
TOTAL	1,588

Source: KNBS County Statistical Abstract, Homabay County (2015)

Looking at the effect of devolution on infrastructure, it is observed that 80% of the facilities had their protected placenta pit before devolution and 50% of the facilities have bought new equipment since devolution came into place. For all other infrastructures under this study majority of the facilities

observed that they had been put into place way before the devolution was introduced. Table 4.6 shows the status of health facilities in Homa Bay County since devolution was introduced.

Table 4.5: Status of health facilities at Homa Bay

INFORMATION CATEGORY		DESCRIPTION/REQUIRED ACTION
	Sub-county	9
	Hospitals (Mission/NGO)	4
	Hospitals (Private)	0
	Nursing homes (Private)	6
	Health centres (Public)	77
	Health centres (Private)	6
	Dispensaries (Public)	141
	Dispensaries	14
Beds capacity:		1,588
Public Health Facilities		
	Provincial Hospitals	0
	County Hospitals	0
	Sub-county Hospitals	842
Total Public facilities		2,190
Total Mission facilities		12
Total Private Health facilities		N/a
Community distribution by Distance to the nearest Health		
	0 – 1 KM	17
	1.1 – 4.9KM	29
	5KM and more	54
Average distance to health facility		7
Doctor/population ratio		1:40,000
Nurse/ population ratio		1: 1,500

(Source: Homa Bay County Integrated Development Plan, 2013 – 2017)

From this table, there is evidence that even after devolution was introduced, facilities are still inadequate. For instance the number of public dispensaries are only 141 and most of them are within 7 kms from most patients. In 2010-2017 the county had projections to improve the health sector, however most of these projections have not been realized. It appears they only exist on paper.

Table 4.6: Health facilities and status

Project Name	Cost estimate (Ksh)	Time Frame	Monitoring Indicators	Monitoring Tools	Implementing Agency	Source of	Implementation Status
Construction, Expansion and	800 M	2010-2017	Minutes of meetings and M&E	MCH, IPD, OPD, & Laundry	Ministry Health	GOK/Donors/ Private sector	On-going
Construction of Wards	160M	2010-2017	No of wards constructed	Field visits, inspection reports, procurement records,	Ministry of Health, CDF	GOK/Donors/ Private sector	On-going
Construction of Treatment Blocks	100M	2010-2017	No of treatment blocks constructed	Field visits, inspection reports, procurement records,	Ministry of Health, CDF	GOK/Donors/ Private sector	On-going
Construction of Maternity Wings complete with incinerators	150M	2010-2017	No of maternity wings with complete incinerators	Field visits, inspection reports, procurement records,	Ministry of Health, CDF	GOK/Donors/ Private sector	On-going
Construction and equipping of laboratory	50M	2010-2017	No of labs constructed and equipped	Field visits, inspection reports, procurement records,	Ministry of Health, CDF	GOK/Donors/ Private sector	On-going

4.6 Level of access to healthcare in Homa Bay County

This section seeks to address and analyse the state of access to healthcare in the county facilities. The variables used to measure these are: population served by the facility, mode of transport used during emergencies and time taken by patients to reach facility. The analysis also covers the state of access before and after devolution to deduce if devolution has had an impact.

Half of the facilities (50%) under the study serve an estimated population of over 10,000 people while 40% serve an estimated population of less than 5000. The most common mode of transport

used by the facilities during emergencies are ambulances while the most common transport means used by referred patients to the facilities are motorcycles. Typically, patients take an hour to reach the facility. For patients that take more than an hour to reach the facilities the most common cause of the delays is due to bad roads making accessibility a big headache. The average distance to health facilities in the county is 7 kms.

The interviewees at the department of health acknowledged that there were shortages of drugs and non-pharmaceuticals due to poor funding. The interviewees reported that the hospitals have to buy the required pharmaceuticals and non-pharmaceuticals from their recurrent allocations and from their own cost sharing. The hospitals receive less than 50% of their requirements in terms of finances. This means that at any one time there is some shortage as the hospitals struggle to purchase the most essential items.

Mostly the priority for the hospitals is on food and essential/basic medicines after settling their water and electricity bills. The situation is not helped by the delays in disbursing the funds from the government. For example, Homa Bay county Referral hospital did not receive recurrent allocations in the financial year 2013-2014 in time, meaning that they had shortages of supplies and their suppliers went unpaid for long as they waited for allocations in the following financial year. Generally, hospitals in the county experience stock outs and shortages of supplies due to inadequate funding. This in turn compromises the quality of service delivery to patients.

According to the integrated development plan 2013-2017, Homa Bay County had projections on improvement of the health sector as indicated in Table 4.8, however most of these projects have not been accomplished. This means that healthcare service has not significantly improved in the county.

Table 4.8: Health improvements projections

Project Name	Cost estimate (Ksh)	Time Frame	Monitoring Indicators	Monitoring Tools	Implementing	Source of	Implementation

Construction, Expansion and equipping	800 M	2010-2017	Minutes of meetings and M&E	MCH, IPD, OPD, & Laundry	Ministry Health	GOK/Donors / Private sector	On-going
Construction of Wards	160M	2010-2017	No of wards constructed	Field visits, inspection reports, procurement records,	Ministry of Health, CDF	GOK/Donors / Private sector	On-going
Tupange Programme	74M	2010-2017		Field visits, inspection reports, procurement records,	Ministry of Health, CDF	GOK/Donors / Private sector	On-going
Construction of Treatment Blocks	100M	2010-2017	No of treatment blocks constructed	Field visits, inspection reports, procurement records,	Ministry of Health, CDF	GOK/Donors / Private sector	On-going

Source: Homa Bay County Integrated Development Plan, 2013 - 2017

In 2012, the county planned to up-scale development of Tier 3 Health Facilities at the cost of Ksh. 500M. This would see Kendu Bay Hospital upgraded, Construction of Modern mortuaries complete with pathologists at the cost of 17 million, however this had not been accomplished. From many of the facilities (70%), observed that ambulances for emergencies existed and were bought before the devolution while the transport means for referrals to the facilities have existed before devolution.

4.7 Healthcare funding & expenditure analysis

Healthcare funding and expenditure analysis looks at the state of facilities in terms of: source of funding, yearly budgets, state of medical equipment and supplies, store auditing and accountability. This section also gives insights as to whether devolution has had impact on the healthcare funding on the facilities. It was generally observed that financing of health care remains very poor in in Homa Bay like other counties in Kenya. The 2015 - 2016 National Budget allocated a paltry 2.8% of the

total national budget (1.7 trillion) to health care. Homa Bay County received just about Ksh. 6 billion from that budget.

As already indicated, the county has several on-going projects worth billions of shillings and which are way above its annual allocation. The poor budgetary allocation from the central government, the interviewees noted, has posed a major barrier to provision of quality health care because there are no sufficient funds to buy drugs and non-pharmaceuticals, improve health infrastructure, employ enough staff, and even for research since over 70% of the budget goes to recurrent expenditures.

The top sources of funding (80%) for the facilities are Donors and NHIF each taking 40% while 70% of the facilities observed have an annual budget of between KES 1,000,000 and 7,000,000. 90% of the facilities said that they do not have adequate funding for medicine, medical equipment and maintaining buildings. 80% of the facilities replenish their medical supplies quarterly while the rest do it annually. 40% of facilities audit their stores quarterly and 30% do so monthly which are the two most common cycles. 90% of facilities expressed that they do not feel devolution has improved medical supply while about 80% of the facilities said they had been replenishing supplies multiple times within the year even before devolution.

Documentary review of the HCIDP 2013-2017 shows that the county allocated more to food, water and electricity (Kshs. 1.57 billion), followed by non-pharmaceuticals (Kshs. 885 million) and finally, pharmaceuticals (Kshs.578 million). But the financial gaps were huge especially for non-pharmaceuticals (Kshs. 743, 226, 601) which call for alternative sources of funding to bridge the gap. Table 4.9 shows the summary of health products for the year 2012-2013.

Table 4.9: Health products for the year 2012-2013

Units of assessment		**Pharmaceuticals (Kshs)**	**Non-pharmaceuticals (Kshs)**	**Food, water, & Electricity**
Requirements from annual		**577,782,470**	**885,118,188**	**1,573,011,460**
Amounts	KEMSA	123,906,963	123,906,963	
	MEDS	701,000	701,000	

received in past 12 months (Ksh.)	OTHER	5,322,400	5,322,400	
Amounts procured using user fees in past 12 months		13,914,007	11,961,224	
Gap (Kshs)		62,155,988	743,226,601	
TOTAL		**577,782,470**	**885,118,188**	

Source: Homa Bay County Integrated Development Plan, 2013 - 2017

As outlined in the Homa Bay County Fiscal Strategy Plan (CFSP, 2019) Total cumulative revenue including A-I-A for the first half of the FY 2018/19 amounted to KSh. 2,387,970,065.35 against a revenue target of KShs. 3,866,043,452.50. This translated to a 38.2% shortfall in projected revenue. Local revenue collection for the first half of the 2018/19 FY stood at KSh.67,833,942 against a target of KSh.86,498,209, representing a shortfall of KShs.18,664,267(21.6%) in local revenue collection. The shortfall in own source revenue collection was as a result of the under-performance in all revenue streams especially rates, cess and parking fees.

The County has continued to experience delayed release of funds from the exchequer, with only KShs.2, 320, 136, 1233.35 having been received against a target of KSh.3, 779,545,243.50 as at end of December 2018. This translated into a shortfall of KSh. 1,459,409,120 both for equitable share funds and grants (38.6%). These figures show that the county spends more on recurrent expenditures (over 70%) as opposed to development expenditures hence the poor state of health infrastructure.

In 2015-2016 financial year, their collection from cost sharing was Kshs. 207 million while the recurrent allocation from government was Kshs. 338 million, again just about 50% of their annual requirement, as reported by the interviewee, and corroborated through the hospital financial documents. The main concern was that even the recurrent allocation from government always comes in late, at times in the last quarter of the financial year, forcing the hospital to incur a lot of debt while also compromising the quality of health services delivered.

However, these figures differed with the estimates in their strategic plan which showed that

annually, the hospital received about kshs. 20 million from government and generated an additional Kshs.160 million through cost sharing. Generally, the hospital received less than 50% of its annual budget, making it difficult to provide optimum services to the people. One interviewee remarked that "we only survive by the grace of God," since the money allocated was less than 50% of the requirement. This certainly compromised the quality of health services delivered to the people.

The sector has also been able to procure drugs and non-pharms for all gazzetted health facilities (260), recruit 711 additional health personnel; the county constructed modern maternity wards in Ndhiwa, Rangwe and Kendu Bay sub county hospitals; renovated part of County referral hospital, established 1 satellite MTCs in Oyugis; procured digitized medical equipment including renal and dialysis machines, x-rays, CT scan and ultra-sound machines; constructed 5 staff houses, constructed 4 general wards, purchased 7 fully equipped ambulances in collaboration with partners, purchased 2 hospital generators, established 14 WASH facilities in the county.

The sector also established green energy (solar energy) in 11 facilities with the support of partners. Delivery in health facilities improved from 47% to 56%. Maternal mortality rate has declined from 673 to 583 per 100,000 live births while under five mortality rates has declined from 170 to 130 per 1,000 live births. (CIDP-Homabay, 2013). As part of promoting healthy living and preventing chronic diseases, a comprehensive County Community Health Strategy has been implemented with 2147 CHWs being recruited in the process across 243 Community Units to emphasize household health beyond clinical care. Output-based approaches in reproductive health are also being implemented and, the County Health Master Plan is being taken seriously.

CHAPTER FIVE

DISCUSSION, CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

This chapter focuses on the discussion, conclusion and recommendations based on the study findings. The chapter also gives recommendations for further areas research.

5.2 Summary

The study assessed the performance of health sector in Homa Bay County before and after devolution in –Kenya. The study was guided by four objectives. Reviewed literature from different sources revealed that Health care sector in Kenya has experienced a lot of challenges since independence under a highly centralized government system. Health management was guided by decisions made at the capital, affecting equitable distribution of health funds and creating inequalities in the provision of health services across the country. It is against this backdrop that devolution was considered under the 2010 constitution to change the management of health system in Kenya.

The Constitutional devolution of healthcare services to the county governments of Kenya was intended to improve the standard and scope of healthcare throughout the country. The belief was that bringing a government closer to the people would aid in the identification of the challenge that had been there for decades and an assessment of the most efficient ways to solve the problem. Research into the circumstances of healthcare in Homa Bay County shows that indeed, these conditions had improved in the last five years with the introduction of devolution; it is accurate to note that there have been major improvements.

5.2.1 Level of access of health care before and after devolution

The first objective was to determine level of access of health services in Homa Bay County before and after devolution in Kenya. The study found out that devolution of the procurement process has enhanced access to drugs and equipment in County and Sub-County. Thus access to drugs has improved after implementation of devolved procurement. However, the findings revealed that lack of adequate medical facilities in Sub-country hospitals and dispensaries was a challenge to the health and safety management in health institutions. Half of the facilities under the study serve an estimated population of over 10,000 people. The most common mode of transport used by the facilities during emergencies are ambulances while the most common transport means used by referred patients to the facilities are motorcycles. Typically, patients take an hour to reach the facility. The average distance to health facilities in the county is 7 kms.

5.2.2 Human resource management before and after devolution

The second objective was to establish the status of human resource management in the health sector in Homa Bay County before and after devolution in Kenya. The study found out that various human resource initiatives had been put in place to increase efficiency. The county is responsible for recruitment and funding of her own staff. Pursuant to Article 235, the county has a public service which is tasked with appointing its public servants within a "framework of uniform national standards prescribed by an Act of Parliament." Nonetheless, the retention of primary Healthcare workers is still a great challenge in Homa Bay County.

The study established that according to half of the respondents interviewed, the changing competitive demands in the job market has affected management of human resource in Homa Bay County. The study revealed that, potential candidates for employment in healthcare sector in Homa Bay appeared to opt for assignment elsewhere especially in private sector. The study also established that, limited willingness of competent staff to work in hardship field stations was a major challenge. The study results showed that inadequate budget earmarked to human resources was a challenge to the management of human resource.

5.2.3 Healthcare infrastructure before and after devolution

The third objective was to evaluate healthcare infrastructure in Homa Bay County before and after devolution in Kenya. The study revealed that not all the departments used ICT in provision of healthcare services in as much as almost all the respondents agreed that use of ICT made service delivery faster and better. This agrees with a research by Adonis (2012) that information technology has made communication cheaper and much faster at any time within a 24 hours cycle.

From the study results, over of the respondents interviewed indicated that they were satisfied with the variety of services provided by the information technology in hospital. Less than half of those interviewed indicated that they were satisfied with the quality and reliability of services provided by the information technology in the hospital. However, majority of the respondents showed that insufficient internet bandwidth or speed partially affected the provision of healthcare service.

Majority of the respondents believe cleanliness of toilets had improved and most facilities have a protected placenta pit. Majority of the facilities disposed sharp waste by burning in an incinerator. A large chunk of facilities had a labor ward and offer inpatient care. However, while inpatient care was offered in most facilities, half of the facilities had 50 or less inpatient beds available.

5.2.4 Funding and expenditure in healthcare before and after devolution

The fourth objective concerned assessing funding and expenditure in health care in Homa Bay County before and after devolution in Kenya. The study established that the national government was the major source of funds for Homa Bay County. Others funds came from sources such as: generation of own revenues by the counties from property taxes, business licenses, and entertainment taxes among others. The County Government had been commended for setting aside some of the funds given to the county for the purchase of ambulances to help citizens who reside far from the medical facilities and need help during emergencies.

The study also found out that the County Government had worked with other organizations such as AMREF and CDC to fund and avail mobile medical outreach projects. These organizations also supplied drugs for treatment of various diseases and offered training with the help of the Ministry of Health (MOH). The interviewees at the department of health acknowledged that there were shortages of drugs and non-pharmaceuticals due to poor funding. The interviewees reported that the hospitals had to buy the required pharmaceuticals and non-pharmaceuticals from their recurrent allocations and from their own cost sharing. The hospitals received less than half of their requirements in terms of finances. This means that at any one time there is some shortage as the hospitals struggle to purchase the most essential items.

5.3 Conclusion

The study assessed the performance of health sector in Homa Bay County before and after devolution in –Kenya. Devolution can be said to be the most drastic, and effective, attempt since Kenya's independence to address the issue of healthcare in Kenya. It has played a very significant role in transforming the lives of people in Homa Bay County and other counties in Kenya. Mortality rates have declined, and the general conditions of healthcare facilities have improved.

However, looking at how effective devolution has been in other countries at short spans of time, one would expect that after 5 years, the problem of access to healthcare should have been solved already, which is not the case in Homa Bay County. Failure to achieve better results may be attributed to the fact that the challenges were enormous and devolution was a totally new phenomenon which required the County to set up new procedures and systems, including transport and communication channels before it was able to begin to have an impact.

5.4 Recommendations

The study recommends that Homa Bay County need improve its infrastructure in terms of having well maintained equipment, purchase of specialized equipment so as to restore public perception of good quality care and achieve devolution goals on improvement of primary health care facilities.

The equipment should be in good working condition and counties should consider having designated units for repair and maintenance. Public health technicians who were trained to maintain physical infrastructure should be hired and the minimum infrastructural standards should be met by the county health facilities.

The study recommends that that Homa Bay County should increase the catchment area of healthcare coverage to be able to serve a wider population. The health facilities should be distributed equally in a manner that a facility is not overwhelmed while the other serves a few clients.

More funding needs to be allocated towards the purchase of medicines, equipment and maintenance of buildings. This can be done by improving county health facility budgets through expanding their source of income and not entirely depending on main government and county government.

The study recommends that Homa Bay County should adopt strategic human resource management that will be able to attract and retain qualified personnel in the health sector. The study established that the human resource department faced constraints in terms of funds for training. The study recommends that the County Government top management should allocate more funds to the human resource department to facilitate effective training of the employees.

The County governments should adopt effective remuneration systems that enhance staff motivation and better productivity.

The study also recommends hiring of more workers to address the shortage of healthcare workforce in healthcare facilities. This can also be done by emulating best practices where non-professional people can be trained to provide basic health care management in terms of education, support treatment for HIV, deliver prescribed medicines and others, freeing up specialized medical staff to perform more complicated procedures. Also, because of low morale by health workers' county health facilities should have various incentives to attract and retain them, such as giving risk allowance, provision of bonuses, among others.

Improvement in financing of critical health investment areas, particularly those relating to improving quality of care is needed. The sector should focus more keenly on improving efficiency in the utilization of available resources, focusing on the counties with the lowest relative efficiency values.

5.5 Recommendations for further studies

Comparative studies should be done between different counties to ascertain whether there has been improvement on county health facilities with the advent of devolution and identify county specific challenges on devolved healthcare. It is also critical that future researchers investigate the impact of county funding on devolution of health.

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APPENDICES

Appendix A: Introduction Letter

Strathmore Business School

Friday, 10th May 2019

To whom it may concern

RE: FACILITATION OF RESEARCH - JAMES ONG'ANG'A

This is to introduce James Ong'ang'a, who is an MPPM student at Strathmore University Business School, Admission Number – MPPM/78925/14. As part of our Masters program, James is expected to do applied research and to undertake a project. This is in partial fulfilment of the requirements of the Master of Public Policy and Management. The outcome would be of immediate benefit to the organizations he is researching on. To this effect, he would like to request for appropriate date from your organization.

James is undertaking a research paper on **'Assessing the performance of health sector in Homa Bay County before and after devolution in - Kenya'**. The information obtained from your organization shall be treated confidentially and shall be used for academic purposes only.
Our MPPM seeks to establish links with industry, and one of these ways is by directing out research areas that would be of direct usefulness to industry. We would be glad to share our findings with you after the research, and we trust that you will find them of great interest, if not of practical value to your organization.

We very much appreciate your support and we shall be willing to provide any further information if required.
Regards

Caroline Tiara
Manager – Masters' Programs
Strathmore University Business School

Strathmore UNIVERSITY
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Appendix B: Ethical Approval

Strathmore UNIVERSITY

6th November 2018

SU-IERC0263/18

JAMES PAUL MILLER ONG'ANG'A
P.O Box 58222 - 00100
Nairobi.

Email: james.onganga@sbs.ac.ke

Dear James,

REF **Student Number:** 78925 **Protocol ID:** SU-IERC0263/18
Assessing the Performance of Health Sector in Homa-Bay County before and after Devolution in –Kenya

We acknowledge receipt of your application documents to the Strathmore University Institutional Ethics Review Committee (SU-IERC) which includes:

1. Research Proposal version 2.1 dated 4th November 2018
2. Participant Information Sheet and Consent form (English)Version 2.1 dated 4th November 2018
3. Research Questionnaires Version and Interview Guide Version 2.1 dated: 4th November 2018
4. CV

The committee has reviewed your application, and your study *"Assessing the Performance of Health Sector in Homa-Bay County before and after Devolution in –Kenya"* has been granted **approval**.

This approval is valid for one year beginning **6th November 2018** until **5th November 2019.**

In case the study extends beyond one year, you are required to seek an extension of the Ethics approval prior to its expiry. You are required to submit any proposed changes to this proposal to SU-IERC for review and approval prior to implementation of any change.

SU-IERC should be notified when your study is complete.

Thank you

Sincerely,

Salim

Amina Salim
Regulatory Affairs Fellow

STRATHMORE UNIVERSITY INSTITUTIONAL ETHICS REVIEW COMMITTEE (SU-IERC)
06 NOV 2018
TEL: +254 (0)703 034 000
P. O. Box 59857 - 00200
NAIROBI - KENYA

Appendix 2: Questionnaire

This questionnaire has been designed to collect information from selected staff of county Health facilities and is meant for academic purposes only. The questionnaire is divided into three sections. Please complete each section as instructed. Do not write your name or any other form of identification on the questionnaire. All the information collected from the questionnaire will be treated with strict confidentiality.

Part A: General Information

Kindly answer all the questions either by ticking in the boxes or writing in the spaces provided.

1. Department or branch: ----------

2. Position in the organization: □ Clinical Officer □□Medical Officer □Pharmacist □Midwife □Laboratory technician□ Accountant□ □Nurse□ Health Information officer□ □Procurement officer□ □other (specify)

……..

3. Level of education:□□ Diploma □ Bachelor's degree □ Master's degree

4. Your gender: □Male □Female

5. Your age: □20-30year's□ 31-40year's □41-50year's □ over 51years

6. The years you have worked in the organization:□Less than 2year's□3-5years □6-8 years □ Over 9years

Part B: Hospital Infrastructure

7. Are clean toilets or latrines available for staff and patients/clients?

□Yes □No

8. Do you have a protected placenta pit?

□Yes □No

9. How does this facility finally dispose of sharps waste, such as needles or blades or what is the final disposal process for filled sharps boxes in this facility?

□Burn in incinerator □Open burning □Dump without burning

□Remove offsite stored in covered container □ □Never have sharps waste

□Other (specify) ……

10. Does this facility have a generator for electricity? This maybe a back-up or stand-by generator.

□Yes □No

11. What is the most commonly used source of water for the facility?

□Piped into facility □ Public tap □Borehole □Protected spring□ Unprotected spring□□Rainwater □others specify

12. Do you have communication facilities (e.g. phones, two way radio)

□Yes □ No

13. Is there ever access to email/internet within the facility?

□Yes□□No

PART C: ACCESS

14. Do you have an estimate of the size of the catchment population that this facility serves, i.e., the target or total population living in the area served by this facility? How many people is that?

□0-5,000people □5000-10,000people □over 10,000people

15. What transport do you use during emergencies?

□Ambulance□ Taxi□ Motorcycle □others specify

16. What is the most common means of transport used by patients who are referred from other facilities to this facility for emergency services?

□Public car/bus □Private car □Ambulance□ Motorcycle□□Bicycle□□People carry/push or pull patient.□ Never receive referrals□ don't know□□other(specify)

17. How much time does it take to for the patients to reach the health care facilities?

□30 mins

□1hour

□Over 1hr

□Don't know

If more than 1hour what could be causing the delay?

Road

Weather

Means of transport

Others specifiy

……**…**

PART D: HEALTH FUNDING AND EXPENDITURE

18. What is your source of funding?

□Government □Local Government□ Donors □ Pre-payment schemes□ NHIF

□others specify

19. What was your budget for the year?

□250,000-500,000□500,000-1,000,000□1,000,000-7,000,000□Others specify

20. Is adequate funding allocated for: Medicine □Yes □ No

Equipment□ Yes □ No

Maintaining buildings□ Yes □ No

21. What is the state of medical equipment?

□Very Good□ □Good □ Very bad □□Bad□ None

22. Has new equipment been bought since county government came into place?

□Yes □ No

If yes please specify…….

23. Do you have a designated unit for repair and maintenance of equipment?

□Yes □ No

If No, where are the equipment repaired?.....

24. Does your health facility offer basic emergency obstetric care? (i.e. pregnancy, child birth and the postpartum period)

□Yes □ No

25. What happens to comprehensive emergency obstetric care which requires specialists? Explain

……

……

26. Do you offer free maternity services?

□Yes □ No

27. Do you have a labour ward

□Yes □ No

28. Does this facility routinely provide inpatient care?

□Yes □ No

29. Does this facility have beds for overnight observation? □Yes □ No

30. How many overnight or inpatient beds does this facility have?

□Number of beds

31. What is the condition of your laboratory?

□Very Good□ □Good□ Very bad □Bad□ others specify

32. How often do you replenish your medical supplies?

Monthly□ Quarterly □Half yearly□Yearly□ others specify

33. How often is the store audited?

Monthly□ Quarterly□ Half yearly□ Yearly □ others specify

PART E: HUMAN RESOURCE STATUS

34. What is the total number of staff?

□1-5 staff□5-10staff □10-15 staff □ others specify

35. In your opinion would you say you are adequately staffed?

□Yes □No

36. Do you receive continual medical educational activities?

□Yes □No

If Yes, which ones?

.....

.....

37. Do you do appraisal?

□Yes □No

After how long

□Quarterly□ Half yearly□ Yearly □ others specify

38. What mechanisms are used for staff motivation?

□Tea for staff □ Lunch for staff □Awards □Letters of appreciation □Time-off

□other forms please state□ No mechanisms for motivation

39. Do you receive promotion for an employee good performance or any form of formal recognition? □Yes □No

40. What is the criterion for promotion?

□Appraisals □Academic qualifications □ others Specify…….....

41. Are there things related to your working situation that you would like to see improved, can you tell me the three things that you think would most improve your ability to provide good quality of care services?

□Training □more knowledge/ updates □ more support from supervisor

□More supplies/stock □Better quality equipment□ Better facility infrastructure

□More autonomy/ independence □Emotional support for staff (counseling / social activities) □ others (specify)

Circle only three items.

Appendix IV: Questionnaire guide for County Executives

(For the County Executive Officer for Health, Chief Officer of Health and County Director of Health) Designation of respondent----------

Comment on the following challenges of strategy implementation:

How ready were you as a leadership to take over healthcare function in the devolved system?

Well prepared, somewhat prepared neutral not prepared extremely unprepared

2. What are the main causes of morbidity and mortality in the county?

How adequate is the financing by the central government compared to your health care budget?

Surplus adequate neutral inadequate huge deficit

Do you have any other sources of financing for health care beside the recurrent allocations?

_____

5. What leadership challenges have you experienced as you try to manage health care in the devolved system?

6. How comprehensive is the county department of health organization structure in clearly outlining the responsibilities of different cadres of staff?

7. How have the values, attitudes and beliefs held by your staff fostered or impeded the effective delivery of health care services to the people?

8. How efficient and prompt is the flow of information from your office to, and from, the lower levels on matters of health care delivery?

9. How is your current staffing levels against your actual needs?

10. Are there training and development opportunities for the various cadres of staff in the county?

11. What are the causes of the frequent strikes by healthcare workers?

14. how adequate is information technology and support system for the effective health care coordination in the county

16. HowwellhaveyouperformedintherealizationoftheaspirationsoftheKHSSP2013-2017 which Homa-bay County has domesticated?

******Thank you for taking your time to complete this questionnaire******

Appendix 3: Sample size

Interview schedule

Sub-county Hospitals	**Head of sub county hospital**	**Nurses**	**Homabay County Executive officers**	**Constituencies**	**Ward administrators**
Rachuonyo South	Medical Superintendent	3	County Executive Secretary for Health	Kasipul	5
Rachuonyo North	Medical Superintendent	3	Chief Officer of Health	Kabondo Kasipul	4
Homabay Town	Chief Executive Officer of Homabay Referral hospital	3	County Director of Health.	Karachuonyo	7
Ndhiwa	Medical Superintendent	3	-	Rangwe	4
Mbita	Medical Superintendent	3	-	Homabay Town	4
Sindo	Medical Superintendent	3	-	-	-
Suba	Medical Superintendent	3	-	Ndiwa	7
Rangwe	Medical Superintendent	3	-	Mbita	5
Kendu- Bay	Medical Superintendent	3	-	Suba	4
TOTAL	**9**	**27**	**3**	**8**	**40**