# ORGANIZATIONAL CHANGE AND PUBLIC HEALTH MATERNAL HEALTH CARE SERVICE DELIVERY IN KITUI COUNTY

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A Research Project Submitted in Partial Fulfillment of the Requirements for the Award of the Degree of Master of Business Administration (Strategic Management Option) of South Eastern Kenya University

# **DECLARATION**

I understand that plagrarism is an offence and	therefore declare that this project report is
my original work and has not been presented to	o any other institution for any other award
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# **DEDICATION**

The project is dedicated to my family and relatives for their unwavering backing and endurance while I was away studying. Thank you very much, and God bless you.

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# LIST OF ABBREVIATIONS AND ACRONYMS

**FGD** : Focused Group Discussion

**KCGMoHS**: Kitui County Government Ministry of Health and Sanitation

**KEMSA** : Kenya Medical Supply Agency

**KNH** : Kenyatta National Hospital

MoF : Ministry of FinanceMoH : Ministry of Health

NACOSTI : National Commission for Science and technology Innovation

NGOs : Non-Governmental Organizations

NHIF : National Hospital Insurance Fund

**PHCS**: Primary Health Care Systems

**PHMHC**: Public Health Maternal Health Care

**SDGs** : Sustainable Development Goals

**SPSS** : Statistical Package for Social Sciences

**UHC** : Universal Health Coverage

**UNPDF**: United Nations Partnership for Development Framework

**VIF** : Variance Inflation Factor

WHO : World Health Organization

#### **DEFINITION OF TERMS**

Leadership:

It is exceptionally basic in the administration interaction and includes impacting individuals to perform exercises that are unique so to arrive at objectives distinguished for the benefit of all (Northouse, 2015).

**Maternal healthcare:** 

Refers to the health services given to ladies when they are expectant, during childbirth, and the period after childbirth. The services offered include family planning, previously established inclination, pre-birth and post pregnancy care in a specific order so as stop maternal mortality and morbidity (WHO, 2010).

**Organizational changes:** 

Infers improving the performance scale of a firm which at times is as a result either because of the capacity of the organization's administrative staff to be proactive (Ebongkeng, 2018).

**Organization Structure**:

Can be characterized as the system of the organization giving an establishment through which organizations operate. It is a framework used to characterize a chain of importance inside an organization (Harper, 2015).

**Revenue Allocation:** 

It is the distribution of the accessible assets inside various divisions in the organization. Viable asset allotment empowers organizations to have better use of the assets and a general improvement in the government services (Li, Ding, Ye, Zhang &Zhuang, 2018).

**Services Delivery**:

Is the demonstration of offering the support to individuals and is seen as a bunch of exercises performed by an organization that targets making worth to the clients and any other partners (WHO, 2014).

Universal Health Coverage: Is characterized as a circumstance where everyone is capable and fit for getting wellbeing administrations independent of where they come from, their race, social class and political affiliations (Obare, Brolan& Hill, 2014).

**Level 4 Hospital:** 

Refers to a regional or sub county hospital that provides a wide range of services, including basic and advanced medical, surgical, and diagnostic care (WHO, 2018).

#### **ABSTRACT**

The devolved governments in Kenya are confronted with poor service delivery particularly in the arrangement of maternal medical care administrations. Maternal medical care benefits in open level 4 hospitals are not gathering up to the quality norm as laid out by the Service of Wellbeing in Kenya. This research paper tried to determine the influence of Leadership, universal health coverage, revenue allocation, and organizational structure on public health maternal health care in Kitui County. This study was informed by three theories namely; Transformational Leadership Theory, Resource Based View Theory and The Theory of Social Health Insurance. The study was focused on 13 public hospitals giving maternity benefits in Kitui County. The target population of the study was 203 medical officers comprising 26 doctors, 10 specialists, 41 level 4 hospital officials and 126 nurses across the 13 level 4 hospitals giving maternity services in Kitui County. Information was gathered by utilization of structured closed ended questionnaire. Data analysis was done utilizing SPSS software. Pearson correlation showed that leadership and universal health coverage have a positive connection with general wellbeing maternal medical care administration conveyance. Model rundown results showed that leadership, universal health coverage, revenue allocation and organizational structure clarify 64.6 percent of public health maternal health care service delivery. Moreover, there was a positive and critical impact of revenue allocation on public health maternal health care service, organizational structure on public health maternal health care service delivery. The review infers that leadership is one of the key health framework factors influencing the presentation of maternal wellbeing administrations at the hospital level. Conclusion can be made further that UHC further advances PHMHC delivery. The study further concludes that satisfactory and proficient assignment of the accessible assets to the vital health units essentially expands the nature of the delivering services. It was likewise concluded that the structure of an organization impacts public health maternal health care service delivery. Recommendations from the study includes the need of maternal medical services suppliers to audit their leadership rules and styles with point of upgrading nature of leadership in the administration of hospitals as well as the need to satisfactorily uphold the execution of UHC. There is need to sufficient help the financing of maternal medical care projects by the public and devolved government. The exploration further suggests for the need of recurrent rebuilding of the organization to permit proficient delivery of maternal administrations to mothers. Transformation of the hospitals should involve clear undertaking allotment among health officials. Future studies should consider using both quantitative and qualitative methodologies.

#### **CHAPTER ONE**

#### 1.0 INTRODUCTION

#### 1.0 Introduction

The section introduces the background, proceeds to problem statement, study objectives, questions, and justification and terminates with scope.

# 1.1 Background of the Study

Generally, delivering of services to the people is the central role of both Kitui county government. The national government needs every Kenyan to get improved services. The global goals (SDGs) designated the decrease by three quarters of the proportion of maternal mortality in the time of 2016-2019 (WHO, 2020). It was assessed that in 2015, the complete number of maternal mortalities was 303,000 around the world. The pregnancy-related demises stay high notwithstanding numerous worldwide, provincial and neighborhood endeavors to check it (WHO, 2015). Notwithstanding, Kenya was among the sub-Saharan nations featured as having tremendous little advancement in satisfying the goal of diminishing by 75 % maternal mortality in the time of 1990 to 2015. Kenya is battling in the decrease of the degree of maternal death rate in the whole country which remains at 362 demises in each 100,000 live births and 38% of the great mortality has been contributed by the incompetent conveyances which are led outside the wellbeing offices (Keats, Macharia, Singh, Akseer, Ravishankar, Ngugi & Bhutta, 2018).

Guaranteeing that maternal wellbeing inclusion for all eager moms is among the significant techniques for accomplishing the Sustainable Development Goals (SDG) on decrease of the maternal death rate. Easy access to maternal care facilities coverage is important in enhancing the mother's wellbeing and that of the fetus. By providing quality maternal care services, it ensures that lives are protected (Wayua, 2017). Easy access to the services of healthcare describes availability, acceptability, affordability, and appropriateness of medical services (WHO, 2022). Accessibility connotes unrestricted access to medical care services by all persons (Susuman & Tsawe, 2014). Better health provision of services demands changes in the organizations.

Change in organization entails using maximally the standards of performance of a company by employing change around strategies or methods (Ebongkeng, 2018). Change in organization can also be the practice of improving the effectiveness of the company as well as facilitating organizational and personal changeover social-behavioral paradigms in the organization (Nyaungwa, Linganiso & Karodia, 2015). It focus on the practices where institutions or companies reform their operations, technologies, arrangement of the organization, structure as a whole, or partial in response to business dynamics and processes (Olubayo, 2014).

The need to impact hierarchical change the board is credited to the gigantic positive results that are gathered as far as further developed effectiveness and consumer loyalty (Fiorio, Gorli & Verzillo, 2018). Change of organization to enhance quality of healthcare services requires multidimensional support of various agencies (Van Rossum & Aij, Simons, 2016). In the context of the study, national government, county, public healthcare service providers, private healthcare service providers, NGOs and other entities have to work concurrently. Organizational change tackles all levels, because they are essential sources of improved progress, and subsequent adjustments that are deemed necessary. Organizational change may help in adjusting the progress of health segments present in the system of health to the positive levels (Ebongkeng, 2018). Adjusting progress within the system of health attain the optimal potential shown in other, same settings can increase results to better levels.

Leadership is extremely basic in the administration interaction and includes contending people to participate in differing exercises to accomplish destinations distinguished to help everybody (Northouse, 2015). Leadership includes making a dream by setting up clear goals and enabling supporters to accomplish those targets. Leadership style is the part of conduct that describes a pioneer. The idea of authority has become significant lately because of its significant commitment towards the nature of administration conveyance and the general presentation (Ghasabeh, Soosay and Reaiche, 2015). In addition, the improvement in the administration the executives styles has seen numerous clients get

fulfilled and altogether expands the assistance conveyance (Hoch, Bommer, Dulebohn and Wu, 2018).

Initiative in health area gives guidance, arrangement across various pieces of organization and obligation to give assets and authority advancement to accomplish shared vision and further develop administration conveyance (Masungo, Marangu, Obunga and Lilungu, 2015). Level 4 hospital initiative that is viable has been related to an expansive scope of jobs. It is a need for emergency level 4 hospital care, including execution of the framework, change of wellbeing goals accomplishment, conveyance of care that is ideal, respectability of framework and productivity and is a fundamental part of the arrangement of medical services (Daly, Jackson, Mannix, Davidson and Hutchinson, 2014).

As indicated by Lewis (2019), the hierarchical change in the organization influences the help delivery and fulfillment of the customers. Ruler, Wissow and Baum (2018) set up that the successful and solid authoritative design in the organization works on the general exhibition. Additionally, the measure of income distributed to every office in business elements decides the maintainability and government assistance fulfillment of individuals (Levinthal, 2017). General health inclusion (UHC) is vital to everybody and the public authority needs to put measures to lessen the expense of getting medicine (Obare, Brolan & Slope, 2014). At long last, powerful authority is significant in the organization and the disappointment and achievement of any organizations is a direct result of the kind of initiative in the business (Lembani, Jackson, Zarowsky, Bijlmakers, Sanders, &Mathole, 2018).

Universal Health Coverage (UHC) is vital to both developing and the developed countries and offers the helpless populace the chance to admittance to the level 4 hospital benefits without any battling (Obare, Brolan, and Slope, 2014). UHC plays a significant role in ensuring the well-being of individuals and communities around the world. Its importance cannot be overstated; it is a beacon of hope, particularly for those in dire need of medical services but with limited resources (WHO, 2015). As indicated by WHO(2014), each person ought to be offered a chance to admittance to better level 4 hospitals benefits paying

little heed to the societal position, political affiliations and the shading. Affordable health administrations offer the residents a chance to look for level 4 hospitals consideration any time unafraid.

Additionally, UHC infers the access to quality essential, effective, safe services of healthcare, together within then budget necessary vaccines and medicines for all without bankruptcy (Obare, Brolan & Hill, 2014). The aim of UHC is to guarantee that all citizens have quality services of healthcare without going into bankruptcy (KEMRI report, 2019). In Kenya, Universal Health Coverage is among the four top pillars with intent that as of 2022, all citizens in Kenya to have access to proper medical care they crave for their wellbeing and health viaUHC reducing cases of health catastrophic expenditure (Okech & Lelegwe, 2016).

Revenue allocation connotes the sum of resources being financial, equipment and human to public agencies or administrative units for enhanced service delivery to the people. In terms of financial resources, it refers to financials channeled to entities for purpose of acquiring necessary equipment, support organization operations and meeting recurrent expenditures (Levinthal, 2017). Proper system of allocating resources is critical to effective service delivery in any public institution. According to Pinto and Slevin (2011), allocating resources prudently is critical to the achievement of organization set goals. Satisfactory and effective share of the existing funds to the necessary hospitals might have upward positive effect on the delivering of services.

Organizational structure defines the process of engagement in an organization with key focus being effective service delivery and attainment of organization goals (Harper, 2015). It is also viewed as framework guiding organization functions, task allocation, accomplishment and feedback as per organization strategic plans (Lembani, *et al.*, 2018). Organization structure also shows hierarchy of engagement from the subordinate to top management and how employees relate to one another as far as organization gals are concern (Chen & Wang, 2014). Therefore, organizational structure forms a basic foundation on how organizations deliver its mandate or functions. In that regard,

organizational structural weaknesses may unfavorably impact how services are delivered inside the level 4 hospital (Muoki, 2016).

Services of maternity should be freely accessed at public hospitals and health centers. The national government channels money to the Ministry of Health through the treasury to support maternal healthcare services. The year 2018, 38% of the MoH funds (Ksh. 4.29B) was meant for the Free Maternity Health Programme, aimed at reducing child mortality rate, maternal deaths and enhanced quality maternal care. In 2019, the allocation was higher than the former years (Ksh. 4.3B) for free maternal service delivery. This is in accordance to the Kenyan budget of 2018/2019 financial year.

# 1.1.1 Global Perspective of Organizational Change in Public Health Sector

The Indian government continues to focus on strategic organizational change to enhance quality of services offered in the sector of health (Afridi, 2017). The board in charge of health sector in India is divided between the public area, private area and non-administrative organization. The nation has been attempting significant health changes to further develop administration of services (Dutta and Lahiri, 2015). The health interventions deliberation improvements to delivery of services of the organization at the level of system and health facility level. Organization change is geared toward supporting service delivery by enhancing task allocation and functionality among the organization personnel.

In Germany, the public health sector underwent significant organizational change between 2019 and 2020, largely driven by the COVID-19 pandemic. The German government implemented various measures to strengthen the country's public health infrastructure, such as expanding testing capacities, creating new contact tracing systems, and increasing funding for research and vaccine development (BMG, 2020). Additionally, healthcare workers and institutions were required to quickly adapt to new protocols and guidelines, such as the use of personal protective equipment and the implementation of social distancing measures (RKI, 2020). These changes have challenged the public health sector

in Germany but have also highlighted the need for continued investment in healthcare infrastructure and preparedness for future pandemics.

In Indonesia, the public authority attempts occasional hierarchical changes to advance upgraded administration conveyance in the wellbeing area (Latief, Nurhaidah and TikaRianty, 2015). The public authority through the Service of wellbeing really takes a look at the nature of care while empowering public foundations remembering the emergency level 4 hospitals for advancing quality help conveyances (UNPDF, 2016). The revolutionary hierarchical changes in the wellbeing area have permitted residents to get to further developed wellbeing administrations in Indonesia.

In the United States, , the federal government implemented has various measures to address these issues in the health sector especially after Covid-19 pandemic, such as increasing funding for public health agencies and vaccine research, developing national testing and contact tracing programs, and establishing public-private partnerships to improve supply chain resilience (CDC, 2020). However, these changes have also highlighted the need for systemic reforms to address underlying issues in the US public health system and ensure long-term preparedness for future health emergencies.

In China, public hospitals are the service inpatient providers. Chinese healthcare system has been undergoing reforms with aim of improving healthcare service delivery (Wang, Loban& Dionne, 2019). Guidelines relating to organization of hospital face definite limitations. Though, health service providers have the liberty to use generated revenue as it plans, the government maintains oversight of the use of the resources (Barber, Borowitz, Bekedam& Ma, 2013; Zhang, Li, Jiang, Zhang, Hu & Liu, 2018). The regime takes key changes in the health segment so as to boost delivering of services (Wang, Loban& Dionne, 2019). Innovative methods of funding of public have slowly grown including social healthcare insurances and supplementary budgets for healthcare emergencies.

# 1.1.2 Regional Perspective of Organizational Change in Public Health Sector

Services delivery in government owned hospitals is meaningfully impacted by organization changes in South Africa. The context of leadership engaged by the leaders of regional healthcare facilities is generally weak which results to delivery of services are poor (Govender, Proches &Kader, 2018). The collective scientific and managerial drawbacks affecting health institutions each and every day demands for resilient leadership to handle them at all levels and spheres (Govender, 2013). Organization Changes occasions the expression of the vision of the organization, adhere to norms and values, and develop trust by motivating followers to attain goals of the organization.

In Nigeria, management and organization of Healthy Service delivery are coordinated by the MoH under federal government. When efficiently established within the health sectors, organization changes enhance services delivery and able to produce anticipated findings of the country's health (Ogbonna, Okafor& Chiadichiem, 2016). If services are managed efficiently, they are able to bring around achievements of the nationally set health goals defined Sustainable Development Goals (Kajang, 2014).

In Rwanda, organization changes has enhanced development health services delivered within the well-being division. The country tops in the rare nations who have gained UHC because of her dream of integrated quality service delivery, equity, comprehensive and inclusiveness, focusing mainly on primary health care (Bucagu, Kagubare, Basinga, Ngabo, Timmons & Lee, 2012). The mentioned progresses are reflected through expansions within health care service utilization and access of the said service. The health systems in Rwanda are solely headed by the Ministry of Health, governing the publicly owned as well as the privately owned health amenities (PHCS, 2017). The MoH cultivates, distributes as well as coordinating execution any policy related to health, approaches and programs; whereas assembling funds meant for expansion of the health sector and connected activities (WHO, 2018).

#### 1.1.3 Kenyan Perspective of Organizational Change in Public Health Sector

The public health sector in Kenya has undergone significant organizational change in recent years, with a focus on improving the quality and accessibility of healthcare services across the country. One major initiative has been the devolution of healthcare services from the national government to county governments, as part of a broader effort to decentralize governance and improve accountability (GoK, 2013). This has led to increased funding for county health systems and the development of new policies and programs aimed at improving health outcomes, such as the Universal Health Coverage (UHC) program (Ministry of Health, 2018). Additionally, there has been a growing emphasis on improving health information systems and leveraging technology to improve healthcare delivery, such as the rollout of the mHealth platform, which enables healthcare workers to collect and share health data in real-time (AMREF, 2019). While there is still much work to be done, these changes represent important steps towards building a stronger and more resilient public health system in Kenya.

In Kenya, absence of vital organizational changes and changes in a public emergency level 4 hospitals has added to unfortunate delivery of services in the public medical hospitals (Owino, 2014). Besides, the administrative ineptitude and absence of qualified staff in open medical level 4 hospitals turns into a limitation adding to poor service delivery within any government hospital (Mutuli, 2014). Poor allotment of assets within the devolved units of government have driven doctors and nurses to keep on fighting over deferred advancements and pay rates (Muchangi, 2015). The health laborers guarantee the organizational changes to the area of wellbeing presented by the devolved government isn't compelling and better the health service be moved to the national government (Mutuli, 2014). Kenya has a fundamental deficiency of health workers since autonomy and the accessible labor force has not had the option to adequately take care of the rising populace prompting the recruiting of specialists from Cuba.

# 1.1.4 Maternal Health coverage and Service delivery

#### 1.1.4.1 Maternal health coverage

It entails healthcare services for expectant mothers, before and after childbirth and during postpartum. This comprises health care services focusing at issues related to family planning, pre-conception, pre-natal, and post-natal with aim of reducing mortality and morbidity (WHO, 2010). Health care services that mother and child get during and pregnancy and post-delivery is critical to the survival of the child and mother.

Thus, maternal health coverage implies the extent in which expectant mothers and those who have delivered alongside their borne children access medical care (Mungai, 2015). Maternal health coverage is thus very critical in enhancing good health for mother and child in the society. However, many expectant mothers still cannot access quality maternal healthcare (Gitobu, Gichangi & Mwanda, 2018). Poor maternal health services may result to death, emotional and psychological pain and economic pains emanating from healthcare expenditure. According to UNFPA, (2012), poor maternal care result to high morbidities and mortalities destroying family fabric.

Minimizing maternal related deaths remains a major challenge in most low-income societies including Kenya. As at 2018, maternal deaths in Kenya stood at 362 per 100,000 mothers and 22 child deaths per 1000 births (Gitobu, Gichangi & Mwanda, 2018). Enhanced maternal healthcare is perceived as remedy to child mortality and maternal related deaths (WHO, 2010). In 2013, maternal delivery charges were abolished by Kenyan government in public health care institutions as an initiative to enhance maternal health coverage (Mungai, 2015). Because of the initiative, public care facilities are funded by the Ministry of Health in form of capital fund to cater for delivery related costs. Therefore, improved and better-quality amenity distribution is essential in helping maternal wellbeing handling.

# 1.1.4.2 Maternal Health Care Service Delivery

Delivering of services in medical services establishments appears as quality, proficiency, office use, availability and supportability of level 4 hospital benefits and offices. Maternal

medical services service delivery involves facility usage, availability to level 4 hospital welfares and facilities, admittance to qualified level 4 hospital staff and good nature of administration. Quality describes the nature of healthcare services provided and entails patient experience, level 4 hospital and management quality (Berman, Pallas, Smith, Curry & Bradley, 2011).

Level 4 hospital quality describes the state of healthcare services provided and whether they conform to level 4 hospital practices and standard set by Ministry of health. Managerial quality describes operational capability of the healthcare management/ institution to oversee the acquisition of health facilities, oversee functionality of the equipment and human personnel and manage data with aim of ensuring quality healthcare services. Patient experience describes the perception of the client (patient about) quality of health services offered and can be positive or negative, excellent, good, bad or worst (Bradley, Pallas, Bashyal, Berman, & Curry, 2010). Quality of health services can thus be operationalized as level of conformation to level 4 hospital care standards, functionality of the various medical facilities and level of satisfaction in relation to healthcare services among the patients.

Efficiency is one of measure when evaluating quality of healthcare services and connoted technical capacity in delivery quality healthcare services (Bradley, et al., 2010). Efficiency assesses if the healthcare facility is optimally deploying utilizing correct mix of human resources, healthcare supplies, facilities and equipment with aim of offering quality maternal healthcare services. In health care institutions, efficiency entails patient/procedure volume, cost to service level and personnel to service ratio (Berman, et al., 2011). The measurement could be the number of healthcare staff per bed, number of daily visits of outpatient and inpatient, bed capacity per healthcare facility and number of other medical facilities.

Utilization describes the level at which health care facilities and medicines are being utilized to serve the patients/volume of services being offered. Utilization is attempts to indicate the level at which health care facilities are being employed to serve patients in

relation to the number of health care facilities and size of the facility (Bradley, *et al.*, 2010). A health care facility that is not optimally deploying the health facilities optimally may be perceived to be underperforming. Utilization is operationalized as volume of patients served in relation to number of health facilities or health capacity. Some of the measures are outpatient appointments for each provider, occupancy rates, and the proportion of expectant women who received NC.

Access defines readiness, affordability, accommodation and tolerability of health care services. According to Berman, *et al.* (2011) access is the extent at which health seekers are able to get or obtain necessary heath care services. In the context of the study, access would mean availability of maternal health care services, number of healthcare facilities within the outreach, sufficient medical facilities for all that are affordable and full access to medical care irrespective of age, race, gender, class or religion (Bradley, *et al.*, 2010). Practical measures of access are physical/geographical distance to the facility, number of waiting hours to be served at the facility, access to transport to the facility, availability of healthcare personnel upon visit, heath care services that are affordable and the manner in which patients are received and treated by the heath care workers.

#### 1.1.5 Profile of Level Four Hospitals

Level Four Hospitals, also known as regional or referral hospitals, are medical facilities designed to provide specialized healthcare services to patients within a specified region (World Health Organization, 2009). These hospitals offer a comprehensive range of services, including emergency care, specialized surgical procedures, diagnostic services, and advanced inpatient and outpatient services. As referral centers, Level Four Hospitals are expected to serve as the final destination for patients with complex medical conditions that cannot be managed at lower-level hospitals (Kruk, et al., 2010). They are equipped with a skilled workforce, advanced medical technologies, and a high standard of care, providing essential support to the healthcare system.

Level Four Hospitals play a crucial role in the healthcare hierarchy, acting as a bridge between primary and tertiary care facilities (Agyepong, et al., 2018). As a result, these hospitals are critical for health system performance and effective service delivery. According to the World Health Organization (2009), a well-functioning Level Four Hospital should have the capacity to manage medical, surgical, and pediatric emergencies, perform complex diagnostic tests, and provide a wide range of specialized medical services. Furthermore, Level Four Hospitals are expected to facilitate the training of healthcare professionals and engage in research activities to inform evidence-based practice and policy-making (Gupta, et al., 2017).

In Kenya, Level Four Hospitals, also referred to as county referral hospitals, serve as a critical component of the nation's healthcare system. These hospitals are responsible for providing comprehensive healthcare services within their respective counties and act as referral centers for Level One to Level Three facilities (Ministry of Health, 2014). They offer a wide range of services, including emergency care, specialized medical and surgical procedures, diagnostic services, advanced inpatient and outpatient care, and rehabilitative services. Furthermore, Level Four Hospitals in Kenya are essential for training healthcare professionals and promoting research activities that contribute to evidence-based practices (MOH, 2017).

#### 1.2 Statement of the Problem

The health sector modifications being executed by government intends to achieve UHC and valuable services for all Kenyans. Declining accessibility, admittance to, and nature of public health services to the public actually stays a significant worry to health services (Mbaka and Mugambi, 2014). The quality of health services are for the most part feeble portrayed by postponed administrations, long lining and embezzlement of monies (Keats, et al., 2018). The devolved government units have seen horrible showing where people have wailed because of inadmissible service delivery (Elbanna, Andrews & Pollanen, 2016). According to the 2020 KDHS, the maternal death pace of the maternal was at a disturbing rate for the seven-year time frame at 362 for each 100000 live births, making Kenya among nations with most noteworthy death rate internationally (Muchangi, 2015). It is assessed that just 44% of the births in Kenya are under qualified specialist. Traditional birth attendants remained at 28 %, family members and companions at 21% and no help at

all at 7%. Besides, in an appraisal, 81% of the deaths announced at Kenya's local level 4 hospitals, 84% were brought about by unacceptable consideration (Ochieng, 2016).

Heath administration has been falling apart among level 4 hospitals in Kitui County. Medical services distribution by quality, effectiveness of level 4 hospital staff in dealing with patients, facility usage, availability and maintainability of level 4 hospital benefits and facilities has been deteriorating (Muthui, 2018). In most health facilities owned by the government, there is intense lack of medical equipments and medications a circumstance that has hampered quality service delivery and passing of pregnant women and baby (Muthui, 2018). Studies show that there has been a critical difference in Kitui County particularly among the public authority medical services suppliers and in poverty stricken regions where availability to private level 4 hospitals isn't affordable (Mutungi, 2012).

Critical examination of previous studies shows that different contextual and conceptual review gaps happened in regard to how organization changes impacts on public health maternal health care (PHMHC) service delivery. An investigation by Wanjiru (2014) just centered around difficulties influencing UHC in Kenya differentiating current review that desires to set up the effect of UHC on PHMHC service delivery, hence along these lines a conceptual gap. This review clarify that service delivery to incorporate thoroughness medical care, inclusion and accessibility of health facilities in maternal medical care facilities of public hospitals introducing conceptual gap. Consequently, this study tried to link these research gaps by establishing the influences of organizational change on public health maternal health care (PHMHC) service delivery in Kitui County.

#### 1.3 Objectives

- i. To find out how leadership influences PHMHC service delivery in Kitui County.
- ii. To establish the influence of UHC on PHMHC service delivery in Kitui County.
- To assess the influence of revenue allocation on PHMHC service delivery in Kitui County.
- iv. To investigate the influence of organizational structure on PHMHC service delivery in Kitui County.

#### 1.4 Research Questions

- i. How does leadership influence PHMHC service delivery in Kitui County?
- ii. To what extent does UHC influence PHMHC service delivery in Kitui County?
- iii. What is the influence of revenue allocation on PHMHC service delivery in Kitui County?
- iv. What is the organizational structure influence on PHMHC service delivery in Kitui County?

#### 1.5 Justification of the Study

Results generated from this research are useful to the interested parties in the health sectors including ministry of health and county governments. The results motivate numerous stakeholders with created aspects on the quality health service provision to the general public and how should be improved. Additionally, the study findings provide information to the county governments on the most proficient method to arrange the management of level 4 hospitals at the region level. Besides, the outcomes are valuable to the common society by furnishing them with information and realities important to ensure usable organization cooperation and organization with different partners in aiding suppliers of health management to productively work more. At last, the detections of the review gives an exact assortment of information and can be utilized by different scientists and researchers as a state of references who might direct future exploration identifying with issues influencing distribution of administrations in the area of health sector.

# 1.7 Scope of the study

In terms of identifying the influence of organization change on PHMHC service delivery, the scope of this research was limited to Leadership, universal health coverage, revenue allocation, and organizational structure were investigated and their influence on PHMHC service delivery in Kitui County. The study specifically focused on all the 13 Level Four Public Hospitals in Kitui County.

# 1.8 Study Assumptions

The study assumed that Kitui County had undergone significant organizational change within its public health system in recent years, which has had an impact on maternal health care service delivery. Also, the study assumed that organizational change has a direct and measurable impact on the delivery of maternal health care services in public health facilities in Kitui County. Moreover, the study assumed that the effects of organizational change on maternal health care service delivery in Kitui County vary depending on the type of change, the specific health facility, and the socio-economic status of the population served. Moreover, the study assumed that the respondents would provide truthful information.

#### **CHAPTER TWO**

#### 2.0 LITERATURE REVIEW

#### 2.1 Introduction

The chapter outlines a review of studies on how changes within the organization influences service delivery. The chapter covers the theoretical literature informing the study and empirical review on study variables. It further presents a conceptual diagram on how predictor variables relate with the outcome variable. Critique of the studies was conducted to show knowledge gaps.

#### 2.2 Theoretical Framework

A theory is an accumulation of certain knowledge, postulation or ideas guiding research regarding the quantification and factual measurement of study phenomenon (Defee, et al. 2010). According to Mentzer*et al.* (2008) good empirical study should be anchored on theoretically background. The study was anchored on Transformational Leadership Theory, Resource Based View Theory and The Theory of Social Health Insurance.

# 2.2.1Transformational Leadership Theory (TLT)

Burns (1978) propounded the transformation leadership theory. The theory states that good leadership is anchored on motivation and morality. Under transformational leadership, there is cultivation of good morals and accountability (Birasnav, 2014; Moynihan, et al., 2013). According to Burns (1978), morals on issues and ability to identify cause of action from transformational leader guides followers. In additional, transformational leader is able to resolve conflict and inconsistencies from a situation by seeking new alterative solutions (Thabethe, 2011). Ledimo, (2014) also notes that transformational leaders are good at creating strategic achievable vision for the organization, communicate it to the employees, build employees' commitment to organization goals via stories, words and symbols and has the ability to remodel the vision as per the dynamic business environment.

Transformational Leadership Theory is useful in the current investigation because it outlines the abilities of upright leadership in enhancing quality service delivery to the organization. In this review, the administrative and regulatory heads of public hospitals

need to learn and accept the transformative initiative abilities when running everyday medical level 4 hospitals issues. Because of extraordinary administration abilities, other medical level 4 hospitals workers are inspired by the senior administration to submit themselves in improving delivery of services in the hospitals. Powerful level 4 hospitals ability is needed in the administration and organization of maternal medical care administrations. Affordable administration abilities at the medical services offices will guarantee that maternal level 4 hospitals facilities are consistently in acceptable condition. Medications will likewise be accessible any time it is required. The hypothesis secures target one, deciding how leadership impact public wellbeing maternal medical care service delivery in Kitui county.

In addition, maternal medical care centers should be supported adequately for it to have the option to procure health equipment, materials and to hire gifted sufficient health staff. However, in many situations, public hospitals does not have or rather gets monies to get drugs and other level 4 hospitals facilities late, sabotaging maternal services delivery. Sensible utilization of accessible health resources calls for affordable initiative. This theory likewise upholds the third objective on what influence revenue allocation have on public health maternal medical care service delivery in Kitui County.

#### 2.2.2 Resource Based View Theory

The resource-based view (RBV) theory is a strategic management framework that emphasizes the role of resources and capabilities in determining a firm's competitive advantage and long-term success. The theory suggests that firms with unique, valuable, and non-substitutable resources and capabilities can achieve sustained competitive advantage and superior performance (Barney, 1991). These resources can include physical assets, intellectual property, human capital, and organizational processes and culture. The RBV theory is relevant to various industries, including healthcare, where the availability and effective utilization of resources are critical to delivering high-quality patient care (Molina-Azorin, 2018).

One key concept of the RBV theory is the idea of "resource heterogeneity," which suggests that firms differ in the types and amount of resources they possess (Wernerfelt, 1984). This heterogeneity can be a source of competitive advantage, as firms with unique and valuable resources can create products or services that are difficult to imitate or substitute. Another key concept is "resource immobility," which suggests that resources cannot be easily transferred or replicated between firms (Barney, 1991). This means that firms can develop a sustainable competitive advantage by leveraging their unique resources and capabilities to meet the needs of their customers better.

The RBV theory has implications for healthcare organizations, particularly in the context of resource allocation and utilization. By understanding their unique resources and capabilities, healthcare organizations can focus their efforts on developing areas where they have a competitive advantage, such as specialized level 4 hospitals expertise or advanced technological capabilities (Gupta et al., 2016). Additionally, healthcare organizations can use the RBV theory to guide their decisions regarding resource allocation, prioritizing investments in areas where they can achieve the most significant impact on patient outcomes.

The Resource-Based View (RBV) theory was used in this study to inform the variable on revenue allocation. According to the RBV theory, resources and capabilities are critical determinants of a firm's competitive advantage and performance. In the context of healthcare, revenue allocation is a critical resource that determines the availability and effectiveness of maternal health care services. The RBV theory suggests that healthcare organizations can achieve sustained competitive advantage and superior performance by leveraging their unique resources and capabilities, including financial resources. Therefore, the allocation of revenue to public health facilities in Kitui County can have a significant impact on maternal health care service delivery and the quality of care provided to expectant mothers. Applying the RBV theory to the assessment of revenue allocation on public health maternal health care service delivery in Kitui County can help identify areas of competitive advantage and opportunities for improvement. By analyzing the unique resources and capabilities of public health facilities, such as human capital, infrastructure,

and equipment, healthcare leaders can identify areas where additional revenue can be allocated to improve maternal health care service delivery.

#### 2.2.3 Theory of Social Health Insurance

The Theory of Social Health Insurance proposes that healthcare should be financed through mandatory contributions from individuals and employers. Under this model, the government establishes a social health insurance scheme that collects contributions from individuals and employers, and uses the funds to finance healthcare services for all citizens (Preker et al., 2002). This model aims to achieve universal healthcare coverage by spreading the costs of healthcare across the population, making healthcare more affordable and accessible for everyone.

In the Social Health Insurance model, individuals and employers are required to make mandatory contributions to the scheme, usually as a percentage of their income or payroll. These contributions are then pooled into a large fund that is used to finance healthcare services for the entire population. The scheme is usually administered by a public entity, and the government sets the benefits package that individuals are entitled to receive (Preker et al., 2002). This model has been implemented in several countries, including Germany, France, and the Netherlands, and has been successful in achieving universal healthcare coverage.

One of the key benefits of the Social Health Insurance model is that it allows for risk pooling across the population. By requiring everyone to contribute to the scheme, the costs of healthcare are spread across a large pool of individuals, reducing the financial burden on any one individual or family. Additionally, the model promotes solidarity among citizens by ensuring that everyone has access to healthcare, regardless of their income or health status (Van de Ven et al., 2000). However, the implementation of Social Health Insurance also presents challenges, such as ensuring the sustainability of the scheme and managing the costs of healthcare services.

This theory proposes that health care should be financed through mandatory contributions from individuals and employers. In this model, a large pool of contributors ensures that the costs of healthcare are spread across the population, making healthcare affordable and accessible to all (Preker et al., 2002). The Theory of Social Health Insurance was linked to Universal Health Care (UHC) and Public Health Maternal Health Care (PHMHC) service delivery in Kitui County. In Kitui County, the establishment of UHC has the potential to improve PHMHC service delivery by ensuring that all citizens have access to quality and affordable health services, regardless of their ability to pay.

# 2.3 Empirical Review

In this part, previous studies are reviewed as per study objectives. The reviewed studies focused on the influence of the independent variables of the study on the dependent variable. Critique of the studies was conducted to show knowledge gaps.

# 2.3.1 Leadership and Service delivery

Several studies have examined the relationship between leadership and healthcare service delivery between 2017 and 2019. According to a systematic review conducted by Wong et al. (2018) in China, transformational leadership was found to be positively associated with healthcare service delivery outcomes, such as patient satisfaction, level 4 hospitals quality, and financial performance. Transformational leaders are characterized by their ability to inspire and motivate their team members, promote teamwork, and encourage innovation and creativity. The review also found that leadership training programs can be an effective way to develop transformational leaders in healthcare organizations.

Another study conducted by Nguyen et al. (2019) examined the impact of leadership on healthcare service delivery in Vietnam. The study found that leadership practices, such as empowering employees, promoting teamwork, and fostering a positive work environment, were positively associated with the quality of healthcare service delivery. The study also found that leadership practices had a significant impact on employee job satisfaction and turnover intention, which are critical determinants of the quality of healthcare service

delivery. The study concluded that developing effective leadership practices is a critical component of improving healthcare service delivery in Vietnam.

Using cross sectional survey, Rigii and Ogutu (2018) studied impact of leadership on county governments' service delivery in Kenya. Positivism was adopted as research philosophy. All the 47 counties were included in the study. The data was collected using structured questionnaires and the findings revealed that leadership significantly influenced services delivering among county governments in Kenya.

In another study, Kosgei (2015) investigated how leadership strategies influence services delivery at KNH in Kenya while utilizing descriptive review strategy. The investigation used both historical data and questionnaire to gather the needed information. Questionnaires were used to gather data from directors, Departmental Heads, Heads of various sections and from management team. Using stratified sampling technique, the study utilized a sample size of sixty employees. Data analysis was conducted by use SPSS version 22 using percentages. The findings recognized effects of leadership development as enhancement, effectiveness and efficiency in services delivering where 56.7 % concurred that the mode used by leaders impacted the quality of services offered to patients at KNH.

Focusing at Department of Health and Social Development in Capricorn district, Thabethe (2011) investigated if leadership impacts service delivery by employing qualitative design. The respondents of the study were selected using purposively. The study findings indicated that leadership contributes to excellent service delivery. Focusing at NGOs in Vavuiya District, Nanthagopan (2012) investigated if leadership impact on organizational performance. Good leadership constitutes well-designed vision, mission and strategies. Primary data were collected by use of questionnaire. The variables were compared using regression analysis. The findings indicate that leadership and management ability account for the organizational performance of both local and international non-governmental organizations.

#### 2.3.2 Universal health coverage and Service delivery

The World Health Organization (WHO) and the World Bank Group (WBG) released a joint report on tracking UHC progress in 2015, emphasizing the need for countries to focus on equitable access to quality healthcare services (WHO & WBG, 2015). Several studies during this period have explored the challenges and opportunities of implementing UHC in low- and middle-income countries. For instance, Stubbs, Kentikelenis, Stuckler, McKee and King (2017) investigated the political and economic factors influencing UHC adoption, while Tangcharoensathien et al. (2018) emphasized the role of political commitment, financing mechanisms, and health system strengthening in achieving UHC.

Wanjiru (2014) investigated issues affecting UHC by NHIF in Kenya. Qualitative data were collected and analyzed using content technique. The challenges identified include weak healthcare system and resource constraint. A conclusion was made that UHC is important in enhancing quality healthcare service delivery. Focusing at Kenya, Okech and Lelegwe (2016) analyzed UHC and healthcare access. The study was literature based review relying on already published materials. The study also depended on primary data gathered through interviews. It was found that UHC commitment result to enhanced healthcare service delivery. The current study focuses at maternal healthcare service delivery.

Obare, Brolan, and Hill's 2014 research conducted an extensive desk analysis on Universal Health Coverage (UHC) in Kenya, delving into relevant literature to examine the nation's healthcare landscape. However, despite the intellectual groundwork laid down by such pivotal research, the actual implementation of a comprehensive UHC framework in Kenya is an ongoing process. The study pointed out that, healthcare in Kenya like in many developing nations, is often marred by various systemic problems. A significant portion of the population lacks easy access to quality healthcare services. Geographic disparities, socio-economic conditions, and resource allocation are some of the factors contributing to these discrepancies in health service access. The rural population often endures the brunt of these issues, as facilities in these areas are typically understaffed, underfunded, and lack necessary equipment and supplies. Moreover, the study asserted that the financial burden

of healthcare is significant. Many Kenyans are forced to pay out-of-pocket for health services, often leading to catastrophic health expenditures that push families into poverty. The existing health insurance coverage is far from universal and tends to favor the wealthy and those employed in the formal sector. The study also underscored the importance of inclusive policy dialogues involving all stakeholders, including policymakers, health professionals, and the public, to create a system that is responsive to the needs of all Kenyans.

Focusing at devolved health referral units, Njuguna, et al. (2017) empirically investigated if free delivery policy impact on how citizens utilize maternal healthcare services. Data was sourced from Kenya Health Information System and analyzed using multivariate regression. It was established that introduction of UHC led to improved maternal care by 37.9%. However, the study did not investigate how organization culture impact role out of UHC.

## 2.3.3 Revenue allocation and Service delivery

Ogbuabor and Onwujekwe (2019) investigated the effect of fiscal decentralization on healthcare financing in Nigeria, finding that a more equitable allocation of resources could lead to improved healthcare access and service delivery. Similarly, McIntyre et al. (2018) explored the challenges and opportunities of transitioning from donor funding to domestic revenue for healthcare in low- and middle-income countries, emphasizing the importance of sustainable and equitable resource allocation for healthcare service delivery.

Dukhan et al. (2019) analyzed the efficiency of health expenditure in improving health outcomes in the Middle East and North Africa region, demonstrating that efficient allocation of resources could lead to better health outcomes, even in the context of limited resources. Additionally, Vitikainen et al. (2017) examined the efficiency of healthcare financing in European countries, suggesting that an optimal allocation of resources could improve healthcare service delivery and overall system performance.

Pallas et al. (2017) assessed the effect of financial incentives on the delivery of maternal and child health services in low- and middle-income countries, finding that performance-based financing could lead to improvements in the provision of essential healthcare services. Moreover, Barroy et al. (2018) evaluated the impact of budget allocation on the implementation of priority health programs in low-income countries, revealing that increased budget allocation to these programs resulted in improved healthcare service delivery and better health outcomes. These studies underscore the importance of strategic revenue allocation in enhancing healthcare service delivery and achieving better health outcomes.

Focusing at Baringo County, Otieno (2016) studied the amount of revenue allocated to healthcare and how it impacts healthcare service delivery. The study employed both quantitative and qualitative. In-depth interviews with key officials in the health and finance departments, as well as Focused Group Discussions (FGDs) with health care providers, are examples of qualitative data. The average utilization rate of health services in Baringo County was 1.30 per capita/year, which was lower than the national average rate of 3.1 per capita/year. Resource allocation to healthcare remains a big problem. However, the study did not show how resource allocation impacts nature of healthcare services offered.

Kimathi (2017) investigated challenges affecting the healthcare sector after devolution. This was a literature based review relying on already published materials. The study identified resource constrain as major challenge to devolved healthcare system in Kenya. However, the study did not indicate how resource constraint impact level of healthcare services provided with special focus to maternal HealthCare. It was found that devolution resulted to improved healthcare infrastructure in terms of access to health facilities and medical staff. However, the study did not show how devolution has impacted maternal healthcare service delivery.

Employing experimental research design using descriptive, Dang, Bakoand Lalu (2016) determined if revenue generated impacted level of services provided to people at Plateau State. OLS was engaged to evaluate the effect of revenue generated on level of services

provided. It was established that revenue generated by local government impacted social service provision. The amount allocated revenue to healthcare was inadequate. Focusing at the devolution of healthcare services in Kenya, Okech (2017) employed situational analysis technique. Secondary and primary data were employed. Revenue allocated to public healthcare is not sufficient. In addition, there is inadequacy of medical facilities alongside shortage of medical staff.

## 2.3.4 Organizational structure and Service delivery

Menguc, Auh, and Kim, (2020) explored the concept of "Ambidextrous Service Organizations: The Role of Service Innovativeness and Service Quality for Service Performance" through a meta-analysis approach. The researchers examined over 50 different studies, providing a comprehensive overview of the research landscape. Their findings revealed a positive relationship between a company's ambidextrous organizational structure, characterized by both centralized and decentralized elements, and its service delivery performance. This supported their initial hypothesis that balancing exploration (innovation) and exploitation (efficiency and consistency) leads to improved service delivery.

Another influential piece of research by Chand (2020) entitled "Organizational Structure and Service Delivery in Public Sector Organizations: A Meta-Analytic Review" adopted a systematic review approach. The study evaluated 35 papers from various public sector organizations worldwide. Chand discovered that hierarchy and centralization, characteristics typical of many public sector organizations, often resulted in lower levels of customer satisfaction due to their limiting effect on service delivery flexibility and adaptation. However, when effectively combined with certain elements of decentralization, such as empowered front-line employees, the impact on service delivery was markedly improved.

Focusing at the government medical providers in Western Kenya, Marangu, Kanchor, Nyandika and Yegon (2014) investigated how organizational structure impacts their performance. Correlation descriptive survey research design was utilized as study design.

It was found that organizational structure positively impacts performance of healthcare service providers in the study region. However, the study did not show how organization culture impacts quality of healthcare services with particular focus on maternal care services.

Focusing at public healthcare facilities in Makueni County Kenya, Wambua (2017) investigated how healthcare administrative roles impacts service delivery. Descriptive research design was adapted as study design. It was found that staff training, motivation, proper remuneration and administrative structure influences service delivery.

Shukri and Ramli (2015) undertook an investigation on how organization structures impact on service delivery at healthcare services providers in Malaysia. Data was collected suing questionnaire administered to 97 healthcare facilities. It was found that rules, policies and procedures of engagement in the individual healthcare service provider impacts service delivery. However, no attempt has been done to determine impact of organization culture on quality of maternal healthcare services.

Andersson, Zbirenko and Medina (2014) determined if organizational structure impacts efficiency of public healthcare entities. Qualitative data were gathered by sue of semi structured interviews. It was found that leadership, organization structure and system of communication within the healthcare provider impacted the efficiency of the healthcare service providers. However, no attempt has been done to determine impact of organization culture on quality of maternal healthcare services.

### 2.4 Research Gaps

A scrutinize of previous investigations shows relevant and applied gaps exist because of organization change on PHMHC service delivery. An investigation by Rigii & Ogutu (2018) researched whether leadership influences delivery of services in the devolved governments. This review didn't restrict itself to explicit part of region government like the Ministry of health. The discoveries may not hence be factual in explaining the health sector especially the maternal medical services facilities introducing a gap. The study by Kosgei

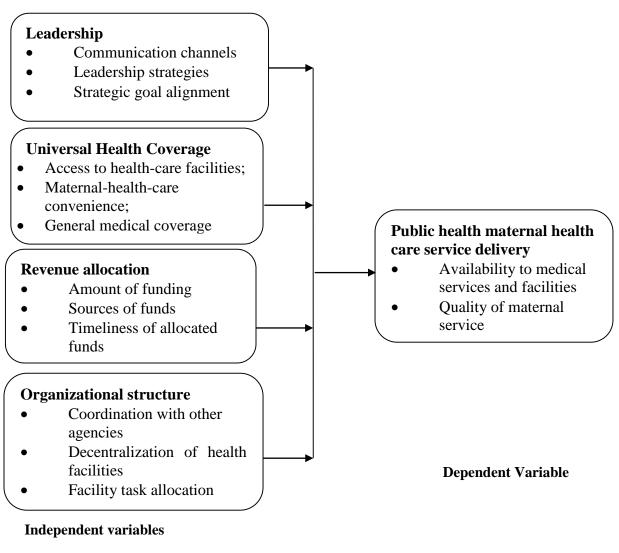
(2015) didn't elucidate the kinds of initiative/leadership abilities that prompted improvement in delivering services at Kenyatta National Hospitals introducing a conceptual gap.

A research by Wanjiru (2014) just centered on difficulties influencing Universal Health Coverage in Kenya differentiating current review that desires to build up what Universal Health Coverage mean for general wellbeing maternal medical care service delivery introducing a affordable gap. Further, Okech and Lelegwe (2016) just centered around one part of wellbeing services distribution which is medical services. The current review wishes to explain delivery of services to incorporate extensiveness medical services, coverage and availability of health facilities in maternal medical services facilities of public hospitals introducing a gap.

A research conducted by Otieno (2016) didn't demonstrate the impacts welcomed by poor asset distribution on health service delivery while an investigation by Kimathi (2017) on difficulties of the regressed health sector recognized resources mobilization to be among the test influencing the healthcare sector didn't identify the effects of money distribution on healthiness services delivery in maternal medical services facilities of government level 4 hospitals in Kenya. Besides, a research by Marangu, Kanchor, Nyandika and Yegon (2014) didn't call attention to the effect of organization structures on health services delivery in maternal medical care facilities while a research by Wambua (2017) didn't elaborate what organizational structure affects for public maternal health care service delivery.

## 2.5 Conceptual Framework

It is a graphical representation of the interrelationship of variables describing a phenomenon within a process system (Adom, et al., 2016). It shows the direction of the relationship as well as how predictor variables influence the outcome variable. Leadership, universal health coverage, revenue allocation, and organizational structure are the independent variables. The dependent variable is maternal health care service delivery in public health. The conceptual framework is depicted in Figure 2.1.



Source: Author, 2021

Figure 2.1: Conceptual Framework

Leadership is defined by the methods employed, mentoring initiatives, and communication channels. Universal Health Coverage (UHC) is defined by the accessibility of health services, access to healthcare facilities, and the affordability of maternal care services. Revenue allocation is evaluated based on the funding sources, the amount of funding provided, and the timeliness of the allocated resources. Organizational structure is defined by the division of tasks, collaboration with other organizations, and centralization of work. Service delivery is defined by the quality of services, efficiency of staff in Level 4 hospitals, utilization of facilities, access to Level 4 hospital services and facilities, and the sustainability of maternal services. It is predicted that leadership, UHC, revenue allocation, and organizational structure influence the delivery of health services. Effective service delivery in the healthcare sector involves the utilization of hospitals, access to services and facilities at Level 4 hospitals, access to qualified Level 4 hospital staff, and the quality of service.

#### CHAPTER THREE

### 3.0 RESEARCH METHODOLOGY

#### 3.1 Introduction

This section presents methodology guiding the research investigation. Particularly, it presents study design, targeted population, sample size and sampling procedure, research instrument, procedures for information gathering and pilot study. In addition, mode of data analysis, diagnostic tests and ethical considerations have been outlined.

## 3.2 Research Design

It entails the guide in answering the fundamental objectives of a proposed research by outlining approach and methods (Bryman, 2015). The present study utilizes a descriptive research method. In order to describe something, this design is suitable. The population under study by considering the and why in the population. Descriptive survey design is also suitable in determining the correlation among parameters in the research (Laurel, 2011).

In the context of this study, it enabled the effect of the independent variables (leadership, UHC, revenues distribution and organization structures) on maternal healthcare service delivery. This approach was utilized previously by Kosgei (2015) when reviewing the relationship between leadership strategies and service delivery at KNH, Dang, BakoandL alu (2016) while determining if revenue generated impacted level of services provided to people at Plateau State, Shukri and Ramli (2015) on the impact of organizational structure on service delivery at healthcare services providers in Malaysia.

### 3.3 Target Population

The term involves gatherings of objects, items or people to be studied (Sekeran & Bougie, 2010). This research concentrated on 13 level 4 hospitals in Kitui County that provide maternity care. The units of observation comprised 203 medical officials from Kitui County's 13 level four hospitals that provide maternity services, including 126 nurses, 41 level 4 hospitals officers, 10 specialists and 26 doctors (KCGMoHS, 2019). This was to allow for a comprehensive examination of different perspectives and expertise in maternal

healthcare. Each category brings unique knowledge, skills, and roles to the table, which can contribute to a more comprehensive understanding of the organizational change dynamics and its impact on service delivery.

**Table 3.1: Target population** 

Name of the Public Hospital	No. of Level 4 Hospitals officers	No. Nurses	of	No. of Specialists	No. of Doctors	Total
Ikanga	2	9		0	1	12
Ikutha	3	11		0	1	15
Kanyangi	2	12		1	2	17
Katulani	4	9		1	2	16
Kauwi	3	10		1	2	16
Kyuso	4	9		1	2	16
Migwani	3	8		0	2	13
Mutitu	3	8		0	2	13
Mutomo	5	13		2	4	24
Mwingi General	4	11		2	3	20
Nuu	3	10		1	2	16
Tseikuru	3	7		0	1	11
Zombe	2	9		1	2	14
Total	41	126		10	26	203

**Source: County Ministry of Health (2023)** 

# 3.4 Sample Population

Sample refers to a portion of the aggregate population under consideration for study (Desu, 2012). Yamane (1967) formula was employed to compute the sample size. The Yamane (1967) formula is beneficial for determining sample size because it provides a mathematically and statistically sound method to calculate the number of samples needed for research. This formula is particularly effective when dealing with large populations

where it's practically impossible or extremely costly to study every single unit. By providing a simplified means to achieve an appropriate sample size, it facilitates a balance between ensuring research reliability and practical feasibility. Furthermore, it incorporates a precision level which allows researchers to control the potential error rate in their study, contributing to the robustness of the research findings. Finally, this formula assumes a normal distribution, which makes it universally applicable across different fields of research. Thus, as ample of 135 health officers which is 16% of the target population was calculated by use of the formula as;

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

Where:

n =size of the sample

N =size of the population

e = precision level

1 = Constant

 $n = 203/1 + 203(0.05)^2$ 

 $= 134.67 \approx 135$ health officers

Table 3.2: Sample size

Name of the Public	No. of	No. of	No. of	No. of	Total
Hospital	Nurses	Doctors	Specialists	Level 4 hospitals officers	
Ikanga Hospital	5	1	0	1	7
Ikutha Hospital	7	1	0	2	10
Kanyangi Hospital	6	1	1	1	9
Katulani Hospital	6	1	0	3	10
Kauwi Hospital	7	1	1	2	11
Kyuso Hospital	6	1	1	3	11
Migwani Hospital	6	1	0	2	9
Mutitu Hospital	7	1	0	2	10
Mutomo Hospital	9	3	1	4	17
Mwingi General Hospital	7	2	1	3	13
Nuu Hospital	7	1	1	2	11
Tseikuru Hospital	5	1	0	2	8
Zombe Hospital	6	1	1	1	9
Total	84	16	7	28	135

**Source: County Ministry of Health (2023)** 

# 3.5 Sampling Procedures and Techniques

Sampling procedure and technique refer to method employed by researcher to choose the sample size (Lind *et al.*, 2008). To select 84 nurses, 28 level 4 hospitals officers, 7 specialists and 16 doctors, stratified random sampling will be used, with the strata being the doctors, specialists, level 4 hospitals officers, and nurses. In this study stratified random sampling was employed to select participants based on specific criteria. To select 84 nurses, 28 level 4 hospitals officers, 7 specialists, and 16 doctors, the population was divided into distinct strata representing each professional category. Within each stratum, individuals were randomly selected to ensure proportional representation. By contacting and confirming the selected participants, the final sample was established, ensuring the desired number of healthcare professionals from each category was included. This sampling technique aimed to enhance the accuracy and representativeness of the sample, allowing for more robust conclusions in your study. The study included at least all of the government hospitals defined.

### **3.6 Research Instruments**

Questionnaire was employed in this study. Marshall et al. (2010) is appropriate in measuring opinions, views and perceptions. A 5-likert type questionnaire was be used. There were 6 sections in the questionnaire. Section A captured the profiled the information of the hospitals and respondents while section B, C, D and E focused on leadership, UHC, revenue allocation and organizational structure in relation to PHMHC service delivery. Section F was on PHMHC service delivery.

### 3.7 Data Collection Methods and Procedures

This refers to approach to collecting data (Leavy, 2015). A structured questionnaire was engaged in collecting information where it was administered to respondents in person. They were presented to the health officials sampled in the health facility in Kitui County for filling. Questioners are suitable in collecting opinions, views and perception according to Sutrisna (2009).

## 3.8 Pilot Study

This is a small investigation depicting the key research meant for identifying limitations and flaws to be encountered during actual study (Cooper & Schindler, 2011). In ascertaining reliability test, a pilot test was conducted in Makueni County. The pilot county has been at the forefront of bringing universal health care to its residents. The pilot study participants were not included in the actual study.

## 3.8.1 Validity

This describes the capacity of a research tool to accurately quantify what it was meant to (Leung, 2015). This involved both content and constructs validity. Health experts were employed to enhance validity of the instrument. To ensure construct validity, the questionnaire was categorized into six sections with each section capturing specific information of interest in the study. For content validity, the supervisors overseeing the project evaluated the instrument, made suggestions and comments which were used to improve the questionnaire.

## 3.8.2 Reliability

Reliability depicts the consistency of the instrument (Cronbach, 1951). To check the reliability of the questionnaire, Cronbach's alpha is used (Creswell & Creswell, 2017). For pilot, a 10 percent of the sample size representing 14 respondents from Migwani Hospital, Mutomo Hospital and Mwingi General Hospital was selected for piloting. The 14 respondents were made up of 5 nurses, 2 doctors, 4 specialists and 3 hospital officers. Cronbach's alpha was employed where the cutoff point of alpha coefficient of 0.7 and above was deemed acceptable. Cronbach's alpha value was generated statistically using SPSS and the threshold was set as 0.7.

## 3.9 Data Analysis and Presentation

Data analysis entails subjecting data collected to particular mathematical computation by use of selected software to make interpretation from it. SPSS 25.0 was employed to analyze the data and involved descriptive and inferential output. Frequencies, means, standard deviations and percentages were the particular descriptive statistics while multivariate and person correlation formed the inferential output. 95% confidence interval was adapted in this study. They were used since the study sought to assess the association between independent and dependent variables. Presentation of result output was through tables. The multivariate model estimated is:

$$\mathbf{Y} = \beta_0 + \beta_1 \mathbf{X}_1 + \beta_2 \mathbf{X}_2 + \beta_3 \mathbf{X}_3 + \beta_4 \mathbf{X}_4 + \epsilon$$

Where;

Y = Public health maternal health care service delivery

 $X_1 = Leadership$ 

 $X_2$  = Universal health coverage

 $X_3$  = Revenue allocation

 $X_4$  = Organizational structure

In the model,  $\beta_0$ depicts the constant value,  $\beta_i = 1....4$  shows beta coefficients for the independent variables, Y is the dependent variable and  $X_1$ ,  $X_2$ ,  $X_3$  and  $X_4$  are predictor variables. The error term is depicted by  $\epsilon$ .

## 3.10 Diagnostic Tests

Running diagnostic tests is vital to ensure that basic model assumptions are not violated. Failure to check for model assumption tests result to inaccurate parameter estimates. The tests tested include Multicollinearity, normality and linearity.

## 3.10.1 Test for Multicollinearity

Multicollinearity exists when there is high correlation between variables under study. These correlations result to incorrect coefficient estimates. Variance inflation factor (VIF) was employed to check for multicollinearity. Acceptable VIF are those with values  $\ll$  5. VIF  $\geq$  5 indicates presence of collinearity (Haitovsky, 1969).

## **3.10.2** Normality Test

Kolmogorov-Smirnov (K-S test) was employed to check for normality of data distribution. When the sample size exceeds 100 observations, the Kolmogorov-Smirnov test is used (Saunders & Thornhill, 2012). K-S p-values less than 0.05 indicate that error variance in data is not normally distributed while computed p-vales greater than 0.05 implies error variance in data is normally distributed.

### 3.10.3 Linearity Test

To measure linearity, scatterplots is employed (Razzaq, Wang, Chupradit, Suksatan & Shahzad, 2021). Data has to be linear for it to be used to model multivariate models. Data that depict linear scatter plot are deemed appropriate for use in actual multivariate modeling.

#### 3.11 Ethical Consideration

Factors of ethics associate to the standards of morals which the analyst should consider in all methods of research in all the research design stages (Basit, 2013). All writings applied in the research was appropriately cited to minimize level of plagiarism. Ethical Review Committee and Consent letter was sought before actual data collection. In addition, Research Permit was requested from NACOSTI, permission from the MoH of both levels of government. The participants' consent was sought before participating in the actual

study. Confidentiality of the information was kept and anonymity of respondents was also observed. Only people taking part in the study like correspondents and investigator would have entrance to the collected information.

#### **CHAPTER FOUR**

### **4.0 RESULTS**

This section introduces the findings of the research, Rate of response, reliability and validity, descriptive statistics and model assumption tests are shown in this section. Furthermore, correlation results and multiple regressions were also conducted to establish the connection and linkage between the variables of the study.

## 4.1 Response Rate

A total of 135 surveys were given out whereas 119 of them were correctly completed and submitted. Table 4.1 presents the return rate.

**Table 4.1: Response Rate** 

Response	Frequency	Percent
Returned	119	88.1%
Unreturned	16	11.9%
Total	135	100%

119 were properly filled out of the 135 given questionnaires and given back demonstrating 88.1% rate of reply. The above proportion of reply is considered adequate for drawing valid conclusions about the study participants. Sammut, Griscti and Norman (2021) noted that return rate of 50 % is acceptable and return rate of 70% and above is good. Thus, the return rate of 88.1% is very good for the study. Collection of data procedures applied could have led to this high rate of response. Which include early notification of respondents about the study, emphasis on voluntary engagement in the study, dropping and picking later questionnaires to allow for more time for filling, keeping anonymity of participants as well as confidentiality and calls of follow up to make some clarification on some questions from the respondents.

### 4.2 Demographic Data of Hospitals and Respondents

Table 4.2 presents the demographic data of the participants.

**Table 4.2: Demographic Data of Hospitals and Respondents** 

<b>Demographic Data of respondents</b>	Frequency	Percent
Age of the Hospital in Years		
Below 5	17	14.3
Between 6 and 10	36	30.3
Between 11 and 15	38	31.9
Above 16	28	23.5
Respondents' Gender		
Male	69	58.0
Female	50	42.0
<b>Education of Respondents</b>		
Diploma	56	47.1
Undergraduate	39	32.8
Graduate	24	20.2
Position held		
Level 4 hospital officer	31	26.1
Specialists	15	12.6
Doctors	20	16.8
Nurse	53	44.5
Working experience in years		
Below 5	31	26.1
6 to 9	49	41.2
10 to 3	26	21.8
Above 14	13	10.9

Source: Researcher 2020

The age of the hospitals was introduced. Table 4.2 demonstrates that the greater part of the hospitals were between 6 to 15 years of age. The outcomes infer that most hospitals have been functional throughout the previous one decade, since 2009. How long the hospitals has been in presence might infer more insight and ability with services of maternal health

services. Great maternal medical care services are a portrayal of valuable health services at the hospitals in the county.

The gender direction of the health personnel was established. Delivering health care services might vary dependent on sex direction of laborers. Table 4.2 identifies that the medical staff 58% were male while 42% were female. Men tend seek after courses related to science like medicine contrasted with female. Notwithstanding, in the cutting edge society, more ladies are joining the level 4 hospitals field as equivalent as the male partner. The educational level of the health officers was also sought. Level of training is significant in professional success. The outcomes in Table 4.2 show that most officers held diplomas. There are likewise those with undergraduate degrees, certifications and post advanced degrees. Level 4 hospital field is a science professions that need deeper learning and a lot of researches in the field. The degree of educational accomplishment in maternal health service is indispensable in releasing health service quality.

Further, the study determined that a large portion of the health officials were attendants (nurses). Different officers were level 4 hospital officials, lab staffs and Birth assistants. These are the fundamental work force effectively engaged with maternal medical care services at the hospitals. The vast majority of the officials had 6 to 9 years of working experience. The length one has been working might infer a great deal of mastery experience in administrations of maternal medical services. More involvement with services of maternal medical care infers quality health services delivery.

### 4.3 Pilot Test

Pilot test for the questionnaire was carried out in order to validate the research instruments and to identify the major problems that would be encountered during the actual research study. In this study a total of 9 participants that constituted 10% of the sample size (89) were selected for piloting and did not form part of the final analysis units so as to obtain reliable feedback to improve the questionnaire. According to Kothari and Garg (2004) pilot sample should constitute at least 10% of the study sample. These results were used to check

whether the questions were well understood by the respondents and whether there could be ambiguous ones and to establish validity and reliability of the instruments.

## 4.3.1 Reliability Test

This study used Cronbach's alpha as a reliability testing tool to test the reliability of the questionnaire items. According to Creswell and Creswell (2017), reliability is defined as the situation in which a person who twice gives a questionnaire to a respondent as a data collecting tool obtains results on the second interview that are similar to the first outcome. In order to draw this conclusion from the experimental data, the research looked for a Cronbach alpha coefficient of 0.7 or above. According to Shemwell, Chase, and Schwartz (2015), a reliability level of 0.70 is permitted to be considered appropriate for the purpose of prediction tests or the assumption of construct measurements. As a consequence of this, the research considers a value of 0.7 to be an appropriate standard. To put it another way, figures greater than 0.7 indicate dependability, whilst values less than 0.7 indicate that the research instrument is not reliable. Through the application of Cronbach's alpha formula and SPSS, the reliability was calculated. The results of reliability test is presented in Table 4.3.

**Table 4.3: Reliability Test Results** 

Variable	<b>Number of Items</b>	α>0.7	Comments
Leadership	5	0.925	Reliable
UHC	5	0.876	Reliable
Revenue Allocation	5	0.823	Reliable
Organizational Structure	5	0.775	Reliable
PHMHC Service Delivery	8	0.830	Reliable

Source: Field Data, 2023

As shown in Table 4.3, the Cronbach's alpha values for all the variables in the study were above the acceptable threshold of 0.70, suggesting high reliability. These findings indicate that all variables in the study demonstrated a high degree of internal consistency, confirming their reliability and appropriateness for data collection.

## **4.3.2 Validity Test**

This study incorporated both content and construct validity. The content validity of the questionnaires was assessed by presenting them to experts and supervisors. These questionnaires underwent rigorous examination by project development supervisors to ensure their content validity. Construct validity, on the other hand, was evaluated using the Kaiser-Meyer-Olkin (KMO) measure and factor analysis. The Kaiser-Meyer-Olkin measure was used to statistically determine the validity of the responses. For the responses to be deemed valid and suitable for statistical analysis, the KMO value needed to be greater than 0.5 (Field, 2013). The results of the KMO measure and Bartlett's Test of Sphericity (a significance test) for the questionnaire were computed and are presented in Table 4.4.

Table 4.4: Validity Test using KMO and Bartlett's Test

Variable	KMO	Significance
Leadership	.705	.000
UHC	.645	.000
Revenue Allocation	.725	.000
Organizational Structure	.709	.000
PHMHC Service Delivery	.681	.000

Source: Field Data, 2023

The validity test results presented in Table 4.4 demonstrate that the KMO statistics for all variables exceeded the critical level of significance, which was set at 0.5 (Field, 2013). Additionally, the Bartlett's Test of Sphericity yielded significant results (p < .05) for all study variables. These findings strongly support the suitability and validity of the study variables for subsequent statistical analysis.

## **4.4 Descriptive Statistics**

This section shows the outcomes based on the study objectives.

# 4.4.1 Leadership and PHMHC Service Delivery

Table 4.5 presents the results in relation to objective one in tabular form

Table 4.5 Leadership and PHMHC Service Delivery

Leadership	Strongly	Disagree	Neutral	Agree	Strongly	Mean	SD
	Disagree				Agree		
There are leadership							
strategies that interface							
vision and delivering of							
services in this hospital	46.2%	22.7%	1.7%	12.6%	16.8%	2.3	1.6
The styles used by							
leaders in this hospital							
incorporate mentorship							
programs that help the							
personnel and other							
staffs in services							
understanding	39.5%	28.6%	1.7%	14.3%	16.0%	2.4	1.5
Clear channels of							
correspondence through							
every unit of the level 4							
hospital have improved							
powerful delivering of							
services	42.0%	26.1%	3.4%	15.1%	13.4%	2.3	1.2
The essential objectives							
including services							
accessibility are							
adjusted to the purposes							
laid out in the services							
delivery charter	41.2%	25.2%	2.5%	16.0%	15.1%	2.4	1.5
This hospital has distinct							
missions, followed by all							
staffs and the managers	37.8%	25.2%	3.4%	17.6%	16.0%	2.4	1.3

The outcomes additionally shows that majority (68.9%) of the respondents didn't acknowledge that leadership style given by the administration of the level 4 hospitals incorporate mentorship programs that help health officials and other staffs understanding as demonstrated by mean=2.4 and SD=1.5. This infers that leadership style at the hospitals is incapable which might sabotage legitimate coordination of health services at the area. A more majority (68.1%) of the respondents were not tolerating that clear correspondence channels across every unit of the hospitals have improved powerful services delivery as shown by mean=2.3 and SD=1.2 inferring that most maternal medical care specialist organizations needed clear correspondence channels.

Most (68.1%) respondents disagreed that the essential objectives including administration accessibility are adjusted to the purposes illustrated in the service delivery charter as demonstrated by mean=2.4 and SD=1.5 suggesting that essential objectives of numerous health facilities neglect to line up with the service charter. 66.4% of the respondents didn't acknowledge that the medical care facilities has obvious missions, followed by all health staff and the managers as demonstrated by mean=2.4 and SD=1.3 inferring that some maternal medical services offices needed clear cut missions to improve general wellbeing maternal medical care administrations. The study additionally looked to investigate most normal leadership abilities displayed by health officials at hospitals under study and the result was displayed in Table 4.6.

Table 4.6: Leadership Skills Exhibited by Health Officers at the Hospitals

Leadership skills	Percentage (%)
Communication	65.5
Empathy	69.7
Listening & learning	64.7
Patient-oriented	60.5
Professionalism	33.6
Visionary	35.3

The data in Table 4.6 reveal that health officials at government hospitals exhibited the highest empathy. Communication, learning, and patient-centered leadership abilities were also shown to be widespread among health-care providers. Health officers in public hospitals, on the other hand, lacked professionalism and vision.

# 4.4.2 Universal Health Coverage and PHMHC Service Delivery

Table 4.7 highlights the findings of the study in relation to objective two.

**Table 4.7: Universal Health Coverage** 

Universal Health	Strongly				Strongly		
coverage	Disagree	Disagree	Neutral	Agree	Agree	Mean	SD
Comprehensive health							
services has been							
accomplished in this							
hospital	27.7%	55.5%	2.5%	6.7%	7.6%	2.0	1.1
There is little or no							
limitation to patients							
'accessibility of the							
hospital	28.6%	53.8%	3.4%	4.2%	10.1%	2.1	1.2
Most citizens can afford							
drugs in this hospital	24.4%	60.5%	2.5%	5.9%	6.7%	2.3	1.3
The hospital possesses a							
solid, effective and							
operational arrangement							
of enhancing services							
delivery	31.9%	48.7%	3.4%	8.4%	7.6%	2.1	1.2
The hospital has adequate							
capability of competent							
health personnel familiar							
with necessary quality of							
services outlined in the							
service charter	23.5%	58.0%	4.2%	8.4%	5.9%	2.2	1.1

Table 4.7 demonstrates that 83.2% of members disagreed that total health service delivery has been accomplished in the hospital, as shown by mean=2.0 and SD=1.1 suggesting that UHC is yet to reach to numerous inhabitants in Kitui. 82.4% of the respondents disagreed

that patients can get to the hospitals with practically no cut-off as demonstrated by mean=2.1 and SD=1.2 suggesting that occupants actually experience the challenges of getting health services. It was additionally 84.9% of the respondents were not concurring that the prescriptions in the medical care facility can be afforded by most occupants as shown by mean=2.3 and SD=1.3 inferring that most maternal health care services are not afforded by numerous ladies.

Furthermore, 80.6% of the respondents disagreed that the hospitals have fruitful, properly managed as well as strong system of health that improve delivering of services as demonstrated by mean=2.1 and SD=1.2 inferring that medical care framework organization in Kitui county stays hazardous. Additionally, 81.5% of the respondents disagreed that there is adequacy of very well prepared health officials who are acquainted with required service quality as specified in the charter (mean=2.2, SD=1.1). This shows that most maternal health care hospitals didn't have competent/all around prepared health officials. The investigation additionally investigated how UHC upgraded maternal health care and the results are displayed in Table 4.8.

**Table 4.8: How UHC Enhances Maternal Health Service Care** 

UHC and Maternal Health Service Care	Percentage (%)
Excellent midwifery services are available.	57.1
Accessibility of maternity treatments	76.5
Better post-natal care	80.7
Better-quality pre-natal care	86.6

Table 4.8 indicates that universal health coverage has enhanced maternal health service care in terms of pre-natal care and post-natal care. It was also established that universal health coverage has enhanced access to excellent midwifery services and accessibility of maternity treatments.

## 4.4.3 Revenue Allocation and PHMHC Service Delivery

The findings on the third objective are shown in Table 4.9.

Table 4.9: Revenue Allocation as Exhibited by Health Officers

	Strongly				Strongly		
Revenue allocation	Disagree	Disagree	Neutral	Agree	Agree	Mean	SD
Various ways of							
financing health services							
provided exist in the							
hospital	25.2%	55.5%	6.7%	7.6%	5.0%	2.1	1.0
Funds received from the							
government is adequate							
to procure medical							
apparatuses well as drugs	23.5%	53.8%	7.6%	12.6%	2.5%	2.2	1.0
There is timely release of							
money by the national							
government to aid obtain							
health facilities	38.7%	47.1%	5.0%	2.5%	6.7%	1.9	1.1
The required hospital							
facilities are timely							
circulated by both levels						2.0	1.0
of government	30.3%	52.1%	10.1%	3.4%	4.2%		
Money from other							
organizations like WHO							
enables the hospital							
procure more medical						2.0	1.0
equipment and drugs	31.9%	49.6%	8.4%	5.9%	4.2%		

It is obviously clear in Table 4.9 that 80.7% of the respondents disagreed that there are numerous sources of funds to back health services given by the hospital, as shown by mean=2.1 and SD=1.0. The outcomes suggest that there are restricted resources to fund health in Kitui County. 77.3% of the respondents disagreed that the measure of subsidizing from government is adequate to purchase level 4 hospitals equipment and medications as shown by mean=2.2 and SD=1.0 inferring that Kitui county government doesn't have

adequate resources to secure medical facilities. 86.2% of the respondents disagreed that resources from the national government are dispensed in convenient way to secure health facilities as demonstrated by mean=1.9 and SD=1.1 inferring that resources from the public government are not timely dispensed.

82.4% of the respondents disagreed that health facilities from both levels of government are appropriated in a timely manner as shown by mean=2.0 and SD=1.0. The findings suggest that health equipment and facilities reach late to the county government as a result of delays. A large portion of the respondents were not concurring that the financing gotten from NGOs like WHO has empowered the hospitals to procure extra level 4 hospital equipment and medications as demonstrated by mean=2.0 and SD=1.0 suggesting that the medical level 4 hospitals didn't get any subsidizing from WHO and depended on government for subsidizing. The investigation additionally tried to establish if income dispensed to maternal health services by both governments is adequate. It was additionally settled that larger part of the respondents (81.5%) shows that income dispensed by both levels of government are not adequate. The results infer that income to maternal health services are not satisfactory.

## 4.4.4 Organizational Structure and PHMHC Service Delivery

On the fourth objective, the respondents were asked to show how leadership influences public health maternal healthcare service delivery in Kitui County. Table 4.10 shows the findings.

**Table 4.10: Organizational Structure of the Hospitals** 

	Strongly				Strongly		
Organizational structure	Disagree	Disagree	Neutral	Agree	Agree	Mean	SD
There is clear allocation of							
responsibilities to medical						2.3	1.3
staffs in the facility	29.4%	42.0%	7.6%	7.6%	13.4%		
The harmonization of							
purposes amid the hospital							
and other medical							
agencies like KEMSA and							
MoH is clear	32.8%	36.1%	7.6%	11.8%	11.8%	2.3	1.4
Labor, among other tasks							
are clearly centralized in							
the hospital an occurrence							
that has improved service							
delivery.	35.3%	31.9%	14.3%	7.6%	10.9%	2.3	1.3
The hospital has clear							
definite reporting policy							
spanning all components							
of the facility plus the							
maternity section	27.7%	41.2%	5.9%	15.1%	10.1%	2.4	1.1
Hospital departments are							
united with clear							
communication channels							
with the maternity							
division	34.5%	38.7%	7.6%	10.9%	8.4%	2.2	1.3

Table 4.10 demonstrates that 71.4% of the respondents disagreed that assignments inside the hospital are designated proficiently among medical services staff, as shown by mean=2.3 and SD=1.3. The mean of 2.3 infers that work isn't all around appropriated among health laborers in Kitui County. The results additionally demonstrated that 68.9%

of the respondents disagreed that there is clear coordination of capacities between the medical services office and other medical offices including Kenya Medical Supplies Authority (KEMSA) and MoH as shown by mean =2.3 and SD=1.4. The findings suggest that there is frail coordination between both levels of government with regards to health management framework. It was likewise established that the 67.2% of the respondents were not concurring that work and different functions are centralized in the hospitals, something that has improved services delivery as addressed by mean of 2.3 and standard deviation of 1.3, inferring that the centralization and coordination of health functions in Kitui county remains risky.

69.0% of the respondents disagreed that the hospital has defined reporting platform spanning all units of the hospital including the maternity division as addressed by mean=2.4 and SD=1.1, suggesting that detailing medical problems inside the hospital and among laborers is weak, which might influence the nature of maternity medical care. Results revealed that 73.2% of the respondents were not concurring that different units of the level 4 hospital are incorporated with characterized correspondence channels with the maternity division as shown by mean = 2.2 and SD=1.3. This implies that most hospitals don't have grounded channels of correspondence. The study additionally examined how organizational structure of the hospital are working on delivery valuable maternal medical care services and the findings are indicated in Table 4.11.

**Table 4.11: Organizational Structure** 

Organization Structure	Percentage (%)
Collaboration with other organizations	70.6
Decentralization	55.5
Tasks distribution	80.7
Work centralization	68.1

As shown in Table 4.11, the organizational structure was primarily concerned with work distribution and collaboration with other agencies. At the hospitals, it was also discovered

that the organizational structure entailed centralization of work and decentralization of responsibilities.

# **4.4.5** Public Health Maternal Health Care Service Delivery

Table 4.12 shows the findings on how leadership influences public health maternal healthcare service delivery in Kitui County.

Table 4.12: Public Health Maternal Health Care Service Delivery

Public health maternal health	Very						
care service delivery	poor	poor	Fair	Good	Excellent	Mean	SD
Health care that is comprehensive	39.5%	46.2%	8.4%	3.4%	2.5%	1.8	0.9
Coverage for medical expenses	39.5%	44.5%	4.2%	5.9%	5.9%	1.9	1.1
Health care facilities are readily						1.9	1.0
available.	37.8%	47.9%	5.0%	5.0%	4.2%		
In-hospital response to pregnancy							
emergencies.	26.9%	61.3%	3.4%	5.9%	2.5%	2.0	0.9
Pregnant women who visit the							
hospital are treated with dignity						1.9	1.2
and respect.	36.1%	48.7%	6.7%	4.2%	4.2%		
Pre-maternal, maternal, and post-							
maternal care are all coordinated							
by the healthcare facility.							
	37.0%	51.3%	2.5%	3.4%	5.9%	1.9	1.0
Support for birthing and visiting							
mothers, as well as patient-						1.8	0.8
centeredness	42.0%	46.2%	5.0%	3.4%	3.4%		
This health facility's maternal							
health services are consistent.	28.6%	56.3%	4.2%	5.0%	5.9%	2.0	1.4

Table 4.12 indicates that 85.7% of the respondents noticed that comprehensive health care was wanting, as addressed by mean=1.8 and SD=0.9. The findings infer that the

accomplishment of comprehensive health care services for all mothers in Kitui County remains low. Medical care was poor as demonstrated by mean=1.9 and SD=1.1 inferring that maternal health coverage across Kitui proves to be a major issue. The results additionally featured that accessibility of health facilities was poor as demonstrated by 83.9% or mean=1.9 and SD=1.0. The mean reaction of 1.9 proposes that health facilities, equipment in many occurrences are inaccessible to the patients which influence the nature of maternal medical care being given.

It was additionally noticed that pregnancy crisis cases in the hospital was poor as shown by (85.7%) or mean=2.0 and SD=0.9. The mean reaction of 2.0 infers that taking care of crisis medical problems identified with maternal consideration stays poor in Kitui County. It was likewise settled that pride and regard given to pregnant mothers going to the medical level 4 hospital was poor as addressed by mean=1.9 and SD=1.2; a difficulties of an issue in taking care of expectant moms in composure and regard (88.2%). It was likewise noticed that coordination of medical care office activities including pre maternal, during and post maternal consideration was poor, as addressed by mean=1.9 and SD=1.0 (84.8%). The mean of 1.9 suggests that coordination and timing of pre-natal, during and post-natal consideration for moms stays a test among hospitals in Kitui County. Patient-centeredness and support for delivering and visiting moms was poor as addressed by mean=1.8 and SD=0.8 (88.3%) inferring a concern in personal consideration for patients in the level 4 hospitals. In addition, the progression of maternal health services in the hospitals was poor as shown by mean=2.0 and SD=1.4 (88.2%). The mean reaction of 2.0 suggests that there is a basic concern in the continuation of maternal health services, something that impacts nature of maternal health delivery being given to moms. Descriptive outcomes above infer that public health maternal health care service delivery is still poor.

## **4.5 Model Assumptions Tests**

Running diagnostic tests is vital to ensure that basic model assumptions are not violated. Failure to check for model assumption tests result to inaccurate parameter estimates. The tests tested include Multicollinearity, normality and linearity.

## 4.5.1 Test for Multicollinearity

Variance inflation factor (VIF) was engaged to determine multicollinearity. Acceptable VIF are those with values less than 10 (Obite, C., P Olewuezi, N., U Ugwuanyim, G., & C Bartholomew, D. (2020).. The multicollinearity findings were indicated below.

**Table 4.13: Multicollinearity Test** 

Variable	VIF
Leadership	1.321
Organizational Structure	3.531
Revenue Allocation	4.203
UHC	1.940
Mean VIF	2.74875

Collinearity data (Table 4.13) show that all of the variables have a Variance Inflation Factor (VIF) of less than 10, indicating that the factors are not highly associated and thus no Multicollinearity exists. This indicates whether the variables are suitable for multiple regression analysis.

# **4.5.2 Test for Normality**

Kolmogorov-Smirnov (K-S test) was employed to check for normality of data distribution. The normality test findings are illustrated in Table 4.14.

Table 4.14: Kolmogorov–Smirnov Test for Normality

Variable	Kolmogorov-Smirnov <sup>a</sup>		
	Statistic	Df	Sig.
Leadership	.931	119	.151
Universal health coverage	.835	119	.226
Revenue allocation	.835	119	.261
Organizational structure	.814	119	.266
Public health maternal health care service delivery	.796	119	.261

When a score yields non-significant values (>0.05), it means data is normally distributed (Tabachnik & Fidell, 2007). The results of the Kolmogorov-Smirnov test were noted in Table 4.14. The results of the normality test in the table above reveal that the data for each variable is normally distributed, as the significance value is greater than 0.05 in all cases. This indicates that the data is suitable for correlation and regression analysis.

## 4.5.3 Tests of Linearity

Before undertaking regression analysis, comparative averages were used to evaluate for linearity and graphically illustrate whether there was a linear or curvilinear linkage between two continuous factors. Only a linear relationship between dependent and independent variables may be effectively estimated using regression models (Osborne & Waters, 2002). Table 4.15 shows the linearity results of the relationship between the dependent and independent variables.

**Table 4.15: Tests of Linearity** 

Dependent variable alongside			
independent variable			Sig.
PHMHC service delivery*	Between		
Leadership	Groups	(Combined)	0.000
		Linearity	0.000
		Deviation from	
		Linearity	0.612
PHMHC service delivery*	Between		
universal health coverage	Groups	(Combined)	0.000
		Linearity	0.000
		Deviation from	
		Linearity	0.067
PHMHC Service Delivery service	Between		
delivery* revenue allocation	Groups	(Combined)	0.000
		Linearity	0.000
		Deviation from	
		Linearity	0.409
	Between		
	Groups	(Combined)	0.000
		Linearity	0.000
PHMHC service delivery*		Deviation from	
Organizational structure		Linearity	0.713

The value sig deviance from linearity for the leadership variable versus public health maternal health care delivery of services is 0.612> 0.05, based on the Anova results in Table 4.15 above. The results point to a linear correlation between leadership and public health maternal health care service delivery. Given that the departure from linearity significance value is 0.067, which is greater than 0.05, it suggests a linear association between universal health coverage and public health maternal health care service delivery. Moreover, a departure from linearity of 0.409, greater than 0.05, is observed between revenue allocation and public health maternal health care service delivery, signifying a linear relationship. Given the significance value of deviation from linearity at 0.713, higher than 0.05, a linear association is found between organizational structure and public health maternal health care service delivery.

The linearity test is crucial for demonstrating the relationship between dependent and independent variables. In order to conduct linear regression analysis, the association between the independent and dependent variables needs to be linear. The results from the linearity test indicate a linear pattern within the data set, making it suitable for linear regression modeling. Therefore, linear regression modeling could be employed to examine the effects of organizational change on public health maternal health care service delivery in Kitui County.

## 4.6 Correlation Analysis

In this study, Pearson's correlation coefficient (r) was utilized to investigate the relationship between various factors, specifically focusing on their direction and strength, which could range from -1 to +1. Pearson's correlation was performed prior to executing additional regression analyses. A correlation coefficient (r) of +0.7 signifies a strong relationship, while coefficients from 0.1 to 0.29 indicate a weak correlation. Coefficients in the range of 0.3 to 0.49 represent a moderate correlation, and those between 0.5 and 1.0 signify a strong correlation. When r equals 0, it indicates an absence of association between the variables (Dănăcică, 2017). Table 4.16 shows correlation results.

**Table 4.16: Correlation Matrix** 

		Public health maternal health care service		universal health	revenue	Organizational
Variable		delivery	Leadership	coverage	allocation	structure
Public health maternal		·	-			
health care	Daggag					
service	Pearson	1 000				
delivery	Correlation Sig. (2-tailed Pearson	1.000				
Leadership	Correlation Sig. (2- tailed)	.485**	1.000			
universal	,					
health	Pearson					
coverage	Correlation Sig. (2-	.685**	.404**	1.000		
	tailed)	0.000	0.000			
revenue	Pearson					
allocation	Correlation	.740**	.482**	.603**	1.000	
	Sig. (2-tailed)	0.000	0.000	0.000		
Organizational	Pearson	0.000	0.000	0.000		
structure	Correlation	.723**	.404**	.632**	.543**	1.000
-	Sig. (2-					
	tailed)	0.000	0.000	0.000	0.000	
** Correlation i	s significant a	t the 0.01 le	vel (2-tailed)			

Table 4.16 reveals a significant, moderate, and significant correlation between leadership and PHMHC service delivery (r=.485, p=0.000<0.05). The calculated p-value of 0.000, which is less than 0.05, suggests that the relationship between leadership and PHMHC service delivery is moderate. The findings suggest that as the quality of leadership improves, so does the PHMHC service delivery, indicating a concurrent direction.

Correlation results highlight a strong, significant positive relationship between universal health coverage and public health maternal health care service delivery (r=.685, p=0.000<0.05). The determined p-value of 0.000, less than 0.05, indicates that the relationship between universal health coverage and public health maternal health care service delivery is statistically noteworthy. The results suggest that as universal health coverage gets better, so does the delivery of public health maternal health care services, indicating a shared direction of improvement.

Further, the findings demonstrate a significant and beneficial correlation between revenue allocation and PHMHC service delivery (r=.740, p=0.000<0.05). The calculated p-value of 0.000, which is less than 0.05, signifies that the relationship between revenue allocation and PHMHC service delivery is statistically significant. This suggests that as more revenue is allocated, the quality of PHMHC service delivery enhances, showing a mutual direction. Lastly, Pearson Correlation results also show a significant, strong, and significant correlation between organizational structure and PHMHC service delivery (r=.723, p=0.000<0.05). The calculated p-value of 0.000, less than 0.05, infers that the relationship between organizational structure and PHMHC service delivery is statistically significant. The findings indicate that as the organizational structure improves, so does the PHMHC service delivery, revealing a shared direction of enhancement.

### 4.7 Regression Analysis

The findings indicated in Table 4.17 presents the model summary output results.

**Table 4.17: Model Fitness** 

Model Summary						
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate		
1	$.804^{a}$	.646	.634	.38217		

a. Predictors: (Constant), Organizational structure, Leadership, universal health coverage, revenue allocation

According to the findings in Table 4.17, leadership, universal health coverage, revenue allocation, and organizational structure are adequate variables that explain PHMHC service delivery in Kitui County, with R square of.646. This means that leadership, UHC, revenue allocation, and organizational structure account for 64.6 percent of the disparities in PHMHC service delivery (Dependent variable). Table 4.18 highlights the findings of ANOVA.

**Table 4.18: Analysis of Variance** 

Model		Sum of	df	df Mean Square		Sig.
		Squares				
	Regression	30.410	4	7.602	52.052	.000 <sup>b</sup>
1	Residual	16.650	114	.146		
	Total	47.060	118	}		

a. Dependent Variable: PHMHC service delivery

The ANOVA outcomes show that the general model was statistically significant, since F statistic of 52.052>F critical of 2.46 and p-value computed 0.000<0.05. Furthermore, the findings indicate that leadership, universal health coverage, revenue allocation, and organizational structure are all adequate indicators of public health maternal health care service delivery in Kitui County. The F statistic of 52.052 is greater than the F critical of 2.46, indicating that the model is statistically significant. The organizational structure is a framework used to characterize a hierarchical system inside a firm and is the most essential and crucial element to improve the quality of service delivery. Citizens can now get better health care thanks to radical organization change in the medical sector. Table 4.19 displays the regression coefficient table.

b. Predictors: (Constant), Organizational structure, Leadership, universal health coverage, revenue allocation

**Table 4.19: Beta Coefficients** 

Model		tandardized	Standardized	T	Sig.
	Co	oefficients	Coefficients		
	В	Std. Error	Beta		
(Constant)	.152	.140		1.086	.280
Leadership	.114	.052	.140	2.180	.031
Universal Health	.325	.088	.287	3.699	.000
Coverage	.323	.088	.207	3.099	.000
Revenue Allocation	.183	.090	.233	2.043	.043
Organizational	.243	.088	.289	2.761	.007
structure	.243	.000	.289	2.701	.007

a. Dependent Variable: PHMHC service delivery

The regression model beta coefficients anticipating general wellbeing maternal medical care services delivery is introduced as;

 $Y=.152+.114X_1+.325X_2+.183X_3+.243X_4$ , with Y representing the dependent variable (PHMHC service delivery) while  $X_1$ ,  $X_2$ , $X_3$  and  $X_4$  denotes leadership, UHC, Revenue Allocation and Organizational Structure as the independent variables,

The model indicates that universal health coverage (UHC) ( $\beta$ =-.325) has the most significant positive impact on public health maternal health care service delivery, followed by organizational structure ( $\beta$ =.243), revenue allocation ( $\beta$ =.183), and leadership ( $\beta$ =.114). The results also revealed a positive and significant relationship between leadership and PHMHC service delivery ( $\beta$ =.114, p=.031<0.05). The regression coefficient suggests that an increase of one unit in leadership quality leads to an increase in public health maternal health care service delivery by 114 units. Similarly, the findings showed a significant positive association between UHC and PHMHC service delivery ( $\beta$ =.325, p=.000<0.05). The regression coefficient implies that an increase of one unit in UHC leads to an increase in public health maternal health care service delivery by .325 units.

The model further established a significant relationship between revenue allocation and public health maternal health care service delivery ( $\beta$ =.183, p=.043<0.05). The regression coefficient suggests that an increase of one unit in revenue allocation leads to an increase in public health maternal health care service delivery by .183 units. Furthermore, the results showed a positive and significant relationship between organizational structure and public health maternal health care service delivery ( $\beta$ =.243, p=.007<0.05). The regression coefficient implies that an improvement of one unit in the organizational structure leads to an increase in public health maternal health care service delivery by .243 units.

#### **CHAPTER FIVE**

## 5.0 SUMMARY OF MAJOR FINDINGS

#### 5.1 Introduction

This chapter gives a brief discussion of outcomes of the review. Discussions of results are introduced according to the study objectives.

## 5.2 Summary of Findings

This section presents summary of key findings as discussed in chapter 4. The findings have been discussed per specific objectives.

## **5.2.1** Leadership and PHMHC Service Delivery

The first objective established the impact of leadership on general wellbeing maternal medical care administrations. Association results uncovered a critical moderate positive relationship among leadership and PHMHC service delivery. Relapse coefficient results uncovered that leadership and PHMHC service delivery possess a progressive and huge connection. Leadership has proven to be critical in enhancing delivery of quality maternal healthcare. Effective leadership manifests itself through teamwork and administrative management aimed at enhancing maternal medical services.

Viable wellbeing organization is seen as the foundation of advancement and development in the wellbeing area. Authority at all levels is expected to roll out an improvement in maternal, neonatal, and kid wellbeing. Authority is extensively viewed as fundamental for successful wellbeing frameworks improvement, and it is one of the structure blocks in the World Health Organization wellbeing frameworks system. Level 4 hospital leadership that is effective is associated with broad range of roles. It is a need for level 4 hospital care, including execution of the framework, change of wellbeing purposes accomplishment, conveyance of care that is opportune, trustworthiness of framework and productivity and is a fundamental part of the arrangement of medical care. The outcomes concur with Mulenga, Nzala &Mutale (2018) that leadership practices impacts delivery of services in chosen emergency level 4 hospitals. The outcome likewise concur with Tabitha (2011) who

researched if leadership effects services delivery and showed that leadership adds to brilliant delivering of services.

Changes in wellbeing frameworks fortifying endeavors, particularly through leadership is related to change in help distribution in medical care situations. Health organization and administration accompanies responsibility which is the commitment to address questions with respect to choices and activities. Leadership in medical care settings includes dynamic for complex frameworks involving both the equipment (HR, accounts, medications and innovation, authoritative designs, administration foundation and data frameworks) and the product angles (thoughts, interests, interrelationships, trust, force, qualities and standards). The outcomes concur with La Mourn, et al. (2012) that fortifying the leadership and the board abilities of wellbeing groups, through group put together methodologies centered with respect to chosen difficulties, added to further developed wellbeing administration conveyance results. Moreover Kosgei (2015) who concentrated on leadership advancement techniques and services delivery at KNH set up that the impact of leadership improvements incorporate improvement, productivity and viability in services delivering.

## 5.2.2 Universal Health Coverage and PHMHC Service Delivery

Objective two examined the influence of UHC on PHMHC service delivery. Relationship results showed a huge solid positive relationship between Universal Health Coverage (UHC) and general wellbeing maternal medical care services delivery. Regression results likewise uncovered that UHC and general wellbeing maternal medical care services delivery have a positive and critical relationship. The UHC infers the admittance to quality fundamental, viable, safe administrations of medical services, together inside then spending plan important antibodies and meds for all without chapter 11. In the maternal medical services, UHC guarantees that hopeful ladies, moms and youngsters access great maternal level 4 hospital consideration. UHC empowers expectant moms to get to maternal medical care at affordable charges.

UHC is vital to all countries and offers the helpless populace the chance to admittance to the level 4 hospital benefits with little struggle. UHC empowers expectant moms to get to maternal medical care benefits and guarantees that the nature of those administrations is sufficient to work on the strength of individuals who get them. The outcomes likewise concur with Fast, Jay and Langer (2014) that UHC has led to enhanced maternal care and set up that UHC has prompted further developed maternal medical care amenities.

## 5.2.3 Revenue Allocation and PHMHC Service Delivery

Objective three investigated how revenues allocation influences PHMHC services delivery. Connection discoveries pinpointed a solid positive relationship between income portion and general wellbeing maternal medical care administration delivery. It was likewise settled in the regression model that income portion and general wellbeing maternal medical care administration delivery have a positive and huge relationship. Ideal portion of assets to maternal medical care works with convenient acquisition of fundamental meds, medications and offices needed for maternal level 4 hospital consideration. Insufficient income allotment to maternal wellbeing can result to delay in acquisition of maternal medical equipment, delay in purchase of necessary drugs and medicine and remuneration of maternal care personnel. This phenomenon may result to child mortality, death of the expectant mothers or lifetime complication of mother and child.

Resource allocation is essential in the acquisition of maternal medical facilities and overall administration of maternal health care structure. Satisfactory and effective distribution of the existing funds to the essential wellbeing units meaningfully increases the excellence services delivery. Sufficient revenues apportionment is important in the provision of excellence motherly healthcare services. Kenya allocates 15% to the health care sector as per the Abuja Declaration of 2001. The declaration proposed that maternal amenities should be freely accessible in health centers and public health facilities.

Financial resources from government incomes are dispensed by the MoF to the MoH with for free maternity administrations. Convenient distribution of assets to maternal medical services offices prompts ideal acquisition of important meds, medications and offices needed for maternal level 4 hospital consideration. The outcomes concur with Okech (2017) who experimentally contemplated focusing at the decentralization of healthcare

amenities in Kenya. Okech (2017) found that revenue allocated to public healthcare is not sufficient and that there is inadequacy of medical facilities alongside shortage of medical staff. Likewise, Dang, Bako and Lalu (2016) who determined if revenue generated impacted level of services provided to people at Plateau State established that revenue generated by local government impacted social service provision.

## 5.2.4 Organizational Structure and PHMHC Service Delivery

In view of the fourth objective, a solid positive relationship between organization structures and general wellbeing maternal medical care services delivery was displayed by connection results. It was likewise settled in the model that organization structures and PHMHC service delivery have a positive and critical association. Aligning organization structure to the goals of the organization has been ignored by many health service providers. Properly set organization structure ensures that tasks and functions in the health care facility are properly assigned to relevant maternal health care personnel. This also aids in decision making of any issues related to maternal health care services in the hospital. The results agree with Marangu, Kanchor, Nyandika and Yegon (2014) who investigated how organizational structure impacts their performance and found that organizational structure positively impacts performance of healthcare service providers in the study region. The outcomes are in congruence with Shukri & Ramli (2015) who investigated the impact of organizational structure on service delivery at healthcare services providers in Malaysia and found that rules, policies and procedures of engagement in the individual healthcare service provider impacts service delivery.

#### CHAPTER SIX

## 6.0 CONCLUSIONS AND RECOMMENDATIONS

#### 6.1 Introduction

This section gives applicable conclusions arising from the findings of the investigation as well as gives recommendations and submissions for more study established on the results of the research.

#### **6.2 Conclusions**

This research determines leadership as one of the most important systems of health variables considered as important for successful development of health systems. Leadership forms part of the building blocks within World Health Organization health arrangements structure. It came out to be among the most important systems of health variables impacting the maternal health services performance at the hospital level. The growing appeals to cultivate successful practices of leadership within healthiness care pull on resilient indication of linkage amid leadership and several systems results-among them patients 'gratification, staffs fulfillments well as arrangement, organizational financial performance and general value of care and health results. Leadership that is supportive was evident as dedication on teamwork building determinations; improve systems of management as well as entrepreneurship that are intended to enhance care related to maternal health.

It is further concluded that that UHC advances PHMHC service delivery is likewise improved. UHC has been distinguished as a need for the worldwide health plan. UHC proposes the access to quality, effective and safe important services related to health care, including vaccines for all without going into poverty as well as affordable essential medicines. UHC needs a healthy labor force that is well-performing, accessible, and available. In the maternal medical care, Widespread Wellbeing Inclusion guarantees that hopeful ladies, moms and kid access great maternal level 4 hospital consideration. It empowers hopeful moms to get to maternal medical care administrations and ensure that the nature of those administrations is adequately better to improve the wellbeing of individuals who get them.

The research further reasons that satisfactory and productive assignment of the accessible assets to the important wellbeing units essentially expands the nature of delivering services. Satisfactory income transfer is basic in the delivering of value maternal medical care administrations. Deficient revenue allotment to maternal medical care may cause services that are of poor quality in spite of the increase services related to health facility delivery use. This would thus prompt deficiencies of information sources like medications and different supplies required in prevention of pregnancy related mortalities. Opportune distribution of assets to maternal medical services works with ideal acquisition of vital meds, medications and offices needed for maternal level 4 hospital consideration.

It was additionally inferred that organizational structure impacts the general wellbeing maternal medical care administrations. Structure of organization is a framework applied to depict a pecking order inside an organization and is the main part is upgrading administration conveyance proficiency. It is named as the system of giving an establishment through which organization works; however making an interpretation of key task thought into organization activity is the most troublesome period of the executives of venture, and without fruitful undertakings execution the association may not acquire its objectives. Hence design of association has been broadly named as the association's life structures that gives an establishment inside which associations work. Ensuring that design of the organization is consistent with change objectives is the main wellbeing framework stewardship job that is frequently disregarded in by numerous wellbeing specialist organizations. Adjusting design of association to further develop objectives is fundamental as construction characterizes how functions are designated, where the locus of dynamic lies, and lines of formal power.

### **6.3 Recommendations**

The review found out that leadership impacts on public health care related to maternal health service delivery. The investigation suggests for the need of maternal medical care providers to audit their leadership rules and styles with point of upgrading nature of leadership in the administration of level 4 hospitals. Leadership survey can be directed with help of regional/county government and MOH. Solid and serious leadership is significant

in carrying out general health maternal medical services techniques taken by the county government.

Leadership is broadly considered as significant for effective advancement of health framework, and it is one of the structure blocks in the Kenya's health frameworks system. Managers of medical care administration ought to have abilities, information and mastery needed to satisfy every day commitments. A portion of these obligations and abilities are the necessity to improve and keep up with proficient norms, strategies, and arrangements for different institutional exercises including level 4 hospitals logical examination and health government assistance of the local area. Phenomenal, decisive relational abilities, both verbal and composed, are foremost capacity of a leader to execute a fruitful medical services activity.

It was additionally settled that UHC positively impacts on public health maternal health care service delivery. However UHC is an issue of concern, the review prescribes for the need to sufficiently help the execution of UHC. The function of the program is include all partners including Ministry of Health, area government, individuals and non-legislative associations. The job of UHC in the arrangement of maternal medical care services give an uncommon chance to speed up progress towards finishing preventable deaths and working on the wellbeing and prosperity of ladies and youngsters. There is likewise need to make UHC inclusion strategy comprehensive and straightforward, including different partners including ladies' associations, local area based gatherings, common society and medical care proficient affiliations.

The exploration additionally settled that revenue allocation impacts public health maternal service delivery of health care. The study recommends that there is need to satisfactory help the subsidizing of maternal medical services projects by the national and region government. Convenient allotment of resources to maternal medical care hospitals prompts ideal acquisition of vital medications, medications and facilities needed for maternal level 4 hospital consideration. Late and insufficient income designation to maternal medical services might prompt deficiencies of information sources like medications and different

supplies important to prevent mortalities identified with pregnancy. Sufficient and effective allotment of the accessible assets to the important wellbeing units may essentially build the nature of maternal medical care administrations.

It was additionally established that organizational structure impacts on public health maternal health care service delivery. The exploration suggests for the need of occasional rebuilding of the association to permit effective delivery of maternal administrations to ladies. Rebuilding of the emergency level 4 hospital should involve clear assignment allotment among wellbeing officials. Ensuring that design of the association is consistent with change targets is a key wellbeing framework stewardship work that is regularly neglected in by numerous health specialist organizations. Adjusting structure of the association to better objectives is fundamental as design characterizes how work is given out, where the locus of making decision lies, and lines of formal power.

## **6.4** Areas for Further Research

The exploration depended much on quantitative methodology concentrating on the impact of organizational change on public health maternal health care service delivery. Studies that pay attention on human social and wellbeing prosperity require multi-dimensional methodology to comprehend perception of the genuine circumstance. Future review might consider utilizing both quantitative and qualitative methodologies. Quantitative methodology included mathematical evaluation of information while qualitative methodology depends on characteristics and attributes of the populace. Consolidating information from both approaches limit subjectivity of judgment as well as helps effectively draw in contestants in the exploration. The blended technique approach of examination permits the triangulation of subjective discoveries with the quantitative outcomes permitting top to bottom investigation into the topic.

The review set up that UHC is yet in pilot study in certain spaces in Kenya. Future examination should involve concentrating on impact of organizational change on public health maternal health care service delivery in different provinces for correlation purposes.

In addition, organization structure contrast from one hospital to the next subsequently the need to direct current review with regards to different districts.

More studies is required to research contextual variables that affect the efficacy of insurance coverage of health coverage in optimizing maternal care utilization and to uncover if health care insurance can optimize the application of healthcare related to maternal care services by improving access to services of high quality.

#### REFERENCES

- Adom, D., Adu-Gyamfi, S., Agyekum, K., Ayarkwa, J., Dwumah, P., Abass, K. &Obeng-Denteh, W. (2016). Theoretical and conceptual framework: mandatory ingredients of a quality research. *Journal of Education and Human Development*, *5*(3), 158-172.
- Agyepong, I.A., Sewankambo, N., Binagwaho, A., Coll-Seck, A.M., Corrah, T., Ezeh, A., & Pate, M. (2018). The path to longer and healthier lives for all Africans by 2030: the Lancet Commission on the future of health in sub-Saharan Africa. *The Lancet*, 390(10114), 2803-2859.
- Sammut, R., Griscti, O., & Norman, I. J. (2021). Strategies to improve response rates to web surveys: a literature review. *International Journal of Nursing Studies*, 123, 104058.
- Razzaq, A., Wang, Y., Chupradit, S., Suksatan, W., & Shahzad, F. (2021). Asymmetric inter-linkages between green technology innovation and consumption-based carbon emissions in BRICS countries using quantile-on-quantile framework. *Technology in Society*, 66, 101656.
- Haitovsky, Y. (1969). Multicollinearity in regression analysis: Comment. *The Review of economics and statistics*, 486-489.
- P Obite, C., P Olewuezi, N., U Ugwuanyim, G., & C Bartholomew, D. (2020). Multicollinearity effect in regression analysis: A feed forward artificial neural network approach. *Asian journal of probability and statistics*, 6(1), 22-33.
- Aithal, P., & Kumar, P. (2016). Comparative analysis of theory X, theory Y, theory Z, and Theory A for managing people and performance. *International Journal of Scientific Research and Modern Education*, 1(1), 803-812.
- Andersson, J., Zbirenko, A., & Medina, A. (2014). Effect of organizational structure, leadership and communication on efficiency and productivity-A qualitative study of a public health-care organization. *Bachelor Thesis. UMEA University*.
- Arslan, A., &Staub, S. (2013). Theory X and theory Y type leadership behavior and its impact on organizational performance: Small business owners in the Şishane Lighting and Chandelier District. *Procedia-social and behavioral sciences*, 75(1), 102-111.
- Barber, L., Borowitz, M., Bekedam, H., & Ma, J. (2013). The hospital of the future in China: China's reform of public hospitals and trends from industrialized countries. *Health Policy and Planning*, 29(3), 367-378.
- Barney, J. (1991). Firm resources and sustained competitive advantage. *Journal of management*, 17(1), 99-120.

- Baron, A., & Greenberg, J. (2008). *Behavior in organizations 9th edition*. Pearson Education Inc., New Jersey: 2008. P.248-934.
- Berman, P., Pallas, S., Smith, L., Curry, L., & Bradley, E. (2011). Improving the delivery of health services: A guide to choosing strategies. The International Bank for Reconstruction and Development / The World Bank 1818 H Street, NW, Washington, DC 20433.
- Birasnav, M. (2014). Relationship between transformational leadership behaviors and manufacturing strategy. *International Journal of Organizational Analysis*, 22(2), 205-223.
- BMG. (2020). Gesetz für einen fairen Kassenwettbewerb in der gesetzlichen Krankenversicherung. Retrieved from <a href="https://www.bundesgesundheitsministerium.de/service/begriffe-von-a-z/f/fairer-kassenwettbewerb.html">https://www.bundesgesundheitsministerium.de/service/begriffe-von-a-z/f/fairer-kassenwettbewerb.html</a>
- Bradley, E., Pallas, C. Bashyal, P. Berman, & L. Curry. (2010). Developing Strategies for Improving Health Care Delivery: Guide to Concepts, Determinants, Measurement, and Intervention Design. HNP Discussion Paper. World Bank, Washington, DC.
- Bryman, A. (2015). *Social research methods*. Oxford university press. Oxford: Oxford University Press.
- Bucagu, M., Kagubare, M., Basinga, P., Ngabo, F., Timmons, K., & Lee, C. (2012). Impact of health systems strengthening on coverage of maternal health services in Rwanda, 2000–2010: a systematic review. *Reproductive health matters*, 20(39), 50-61.
- Cooper, R., & Schindler, S. (2011). *Business research methods* (Vol. 9). New York: McGraw-Hill Irwin.
- Creswell, W., & Creswell, D. (2017). Research design: Qualitative, quantitative, and mixed methods approaches. Sage publications: California.
- Daly, J., Jackson, D., Mannix, J., Davidson, M., & Hutchinson, M. (2014). The importance of level 4 hospital leadership in the hospital setting. *Journal of Healthcare Leadership*, 6(6), 75-83.
- Dănăcică, D. (2017). Methodological and applicative problems of using Pearson correlation coefficient in the analysis of socio-economic variables. *Romanian Statistical Review Supplement*, 65(2), 148-163.
- Dang, Y., Bako, E., & Lalu, D. (2016). Impact of revenue generation and utilization on Social service delivery in Plateau State: 2006-2015, *Tax Academy Research Journal*, 1(1), 29-48.

- Dutta, S., &Lahiri, K. (2015). Is provision of healthcare sufficient to ensure better access? An exploration of the scope for public-private partnership in India. *International journal of health policy and management*, 4(7), 467-474.
- Ebongkeng, H. (2018). Organizational change and performance thesis Centria University of applied science. *Case study: African Financial Company SOFINA SA, Cameroon*.
- Fenny, A. P., Yates, R., & Thompson, R. (2021). Strategies for financing social health insurance schemes for providing universal health care: a comparative analysis of five countries. *Global Health Action*, 14(1), 1868054.
- Fiorio, V., Gorli, M., & Verzillo, S. (2018). Evaluating organizational change in health care: the patient-centered hospital model. *BMC health services research*, 18(1), 95-103.
- Flick, U. (2015). *Introducing research methodology: A beginner's guide to doing a research project*. California: Sage.
- Gitobu, M., Gichangi, B., &Mwanda, O. (2018). The effect of Kenya's free maternal health care policy on the utilization of health facility delivery services and maternal and neonatal mortality in public health facilities. *BMC pregnancy and childbirth*, 18(1), 77-83.
- Govender, S. (2013). *The Role of Leadership in Healthcare Service Delivery at Addington Hospital* (Doctoral dissertation, University of KwaZulu-Natal, Durban).
- Govender, S., Proches, G., & Kader, A. (2018). Examining leadership as a strategy to enhance health care service delivery in regional hospitals in South Africa. *Journal of multidisciplinary healthcare*, 11(1), 157-166.
- Gupta, R., Shah, N., & Kumar, P. (2016). Resource-based view in healthcare organizations. International *Journal of Health Care Quality Assurance*, 29(6), 598-610.
- Gupta, S., Khieu, T.Q., Kruk, M.E., & Pate, M. (2017). Looking beyond the 2020 milestone for health-related SDGs: factors that influence country performance. *The Lancet Global Health*, 5(12), e1183-e1184.
- Heale, R., &Twycross, A. (2015). Validity and reliability in quantitative studies. *Evidence-based nursing*, ebnurs-2015.
- Kajang, R. (2014). Organization and Management of Health Services in Nigeria: 1960-2004:(A Case Study of the Federal Ministry of Health, Abuja, Nigeria) (Doctoral dissertation, Ph. D. Dissertation on Health System Management, St. Clements University).

- Keats, C., Macharia, W., Singh, S., Akseer, N., Ravishankar, N., Ngugi, K., ..&Bhutta, A. (2018). Accelerating Kenya's progress to 2030: understanding the determinants of under-five mortality from 1990 to 2015. *BMJ global health*, *3*(3), e000655.
- KEMRI report (2019). Towards Universal Health Coverage in Kenya: Are We on the Right Path? .HERU Policy Brief January 2019.
- Kimathi, L. (2017). Challenges of the devolved health sector in Kenya: teething problems or systemic contradictions?. *Africa Development*, 42(1), 55-77.
- King, A., Wissow, S., & Baum, A. (2018). The role of organizational context in the implementation of a statewide initiative to integrate mental health services into pediatric primary care. *Health care management review*, 43(3), 206-217.
- Kitui County Acts report (2014). Kenya Gazette Supplement. Nairobi: Government Printer.
- Koech, J. (2016). *Internal factors influencing service delivery within the Kenya police service in Kitui County*(Doctoral dissertation).
- Kosgei, K. (2015). Effects of Leadership Development Strategies on Service Delivery At Kenyatta National Hospital, Unpublished Thesis, University of Nairobi.
- Kruk, M.E., Freedman, L.P., Anglin, G.A., & Waldman, R.J. (2010). Rebuilding health systems to improve health and promote statebuilding in post-conflict countries: A theoretical framework and research agenda. Social Science & Medicine, 70(1), 89-97.
- Kumar, P. (2015). An analytical study on mintzberg's framework: Managerial roles. *International Journal of Research in Management and Business Studies*, 2(3), 1-19.
- Kutzin, J., Yip, W., & Cashin, C. (2016). Alternative financing strategies for universal health coverage. In *World Scientific handbook of global health economics and public policy: volume 1: the economics of health and health systems* (pp. 267-309).
- La Rue, K. S., Alegre, J. C., Murei, L., Bragar, J., Thatte, N., Kibunga, P., & Cheburet, S. (2012). Strengthening management and leadership practices to increase health-service delivery in Kenya: an evidence-based approach. *Human resources for health*, 10(1), 25.
- Latief, N., Nurhaidah, Q., &TikaRianty, W. (2015). Indonesia hospital accreditation process impact evaluation: Midline report. Technical Report. Published by the USAID ASSIST Project. Bethesda, MD: University Research Co., LLC (URC).

- Leavy, P. (2015). *Method meets art: Arts-based research practice*. Guilford Publications
- Ledimo, O. (2014). The Role Of Transformational Leadership And Organizational Culture In Service Delivery Within A Public Service Organization, *Journal of Governance and Regulation*, 3(3), 44-51.
- Lembani, M., Jackson, D., Zarowsky, C., Bijlmakers, L., Sanders, D., &Mathole, T. (2018). Leadership and the functioning of maternal health services in two rural district hospitals in South Africa. *Health policy and planning*, *33*(2), 25-35.
- Leung, L. (2015). Validity, reliability, and generalizability in qualitative research. *Journal of family medicine and primary care*, 4(3), 324–327.
- Lewis, L. (2019). Organizational change: Creating change through strategic communication. Wiley-Blackwell: Hoboken.
- Li, J., Ding, Y., Ye, Q., Zhang, N., &Zhuang, W. (2017). On effective capacity and effective energy efficiency in relay-assisted wireless networks. *IEEE Transactions on Vehicular Technology*, 67(5), 4389-4400.
- Lunenburg, C. (2012). Organizational structure: Mintzberg's framework. *International journal of scholarly, academic, intellectual diversity*, *14*(1), 1-8.
- Masungo, W., Marangu, N., Obunga, A., &Lilungu, D. (2015). Effect of strategic leadership on the performance of devolved government system in Kakamega County, Kenya. *European Journal of Business and Management*, 7(13), 327-338.
- McGregor, D. (1960). Theory X and theory Y. Organization theory, 56(23), 358-374.
- Mintzberg, H. (1973). Strategy-making in three modes. *California management review*, 16(2), 44-53.
- Mintzberg, H. (2017). Developing theory about the development of theory. In *Handbook of Middle Management Strategy Process Research*. Edward Elgar Publishing.
- Molina-Azorin, J. F. (2018). Resource-based view theory in healthcare organizations: *a review. Health care management review, 43*(2), 135-144.
- Moynihan, P., Pandey, K., & Wright, E. (2013). Transformational leadership in the public sector. *Public administration reformation: Market demand from public organizations*, 18(1), 87-104.
- Muchangi, J. (2015). What is the state of health under counties in Kenya? Star News Paper, http://allafrica.com.

- Mulenga, R. M., Nzala, S., & Mutale, W. (2018). Establishing common leadership practices and their influence on providers and service delivery in selected hospitals in Lusaka province, Zambia. *Journal of Public Health in Africa*, 9(3).
- Mungai, S. (2015). Determinants of maternal health care services in Kenya. *Unpublished Project*. University of Nairobi.
- Muthui, M. (2018). Factors Influencing The Provison Of Quality Services In Health Care Facilities: A Case Of Kitui County Referral Hospital (Doctoral Dissertation, University Of Nairobi).
- Nanthagopan, Y. (2012). Impact of strategic leadership and management capability on organizational performance, a comparative study between the local and international no-governmental organizations in Vavuiya District. Full paper published in the proceeding of the First annual Research Session, University of Jaffna, Sri Lanka, 2012
- National and County Health Budget Analysis report (2018/2019). Retrieved from FINALNationalandCountyHealthBudgetAnalysis.pdf.
- Nguyen, T. V., Nguyen, H. T., Nguyen, T. T., Do, T. D., Nguyen, T. N., & Tran, B. X. (2019). Leadership practices and quality of healthcare services in public hospitals in Vietnam. *BMC health services research*, 19(1), 325.
- Njuguna, J., Kamau, N., &Muruka, C. (2017). Impact of free delivery policy on utilization of maternal health services in county referral hospitals in Kenya. *BMC health services research*, *17*(1), 429-431.
- Nyaungwa, C., Linganiso, X., & Karodia, M. (2015). Assessing the Impact of Change Management on the Performance of Zimra Region 1 in Zimbabwe. *Kuwait Chapter of Arabian Journal of Business and Management Review*, 33(2581), 1-29.
- Nzioki, M., &Korir, A. (2018). Effect of a Community Health Worker Led Health Education Intervention on Latrine Coverage in Mwingi West Sub-County; Kenya: A Quasi-Experiment. *American Journal of Public Health*, 6(3), 134-138.
- Obare, V., Brolan, E., & Hill, S. (2014). Indicators for Universal Health Coverage: can Kenya comply with the proposed post-2015 monitoring recommendations?. *International journal for equity in health*, 13(1), 1-15.
- Ochieng, I. (2016). Factors Affecting Provision of Quality Service in the Public Health Sector: A case of Nyahururu District Hospital, Kenya. *International Journal of Management and Economics Invention*, 2(9), 852-896.

- Ogbonna, B., Okafor, C., Ejim, E., Samuel, U., Grace, N., & Chiadichiem, C. (2016). Health Care Quality Management in Nigeria Public Sector; Issues and Prospect. European Journal of Pharmaceutical and Medical Research, 77-82.
- Ogbuabor, D. C., & Onwujekwe, O. E. (2019). Aligning public financial management system and free healthcare policies: lessons from a free maternal and child healthcare programme in Nigeria. *Health economics review*, 9(1), 1-10.
- Okech, C., &Lelegwe, L. (2016). Analysis of universal health coverage and equity on health care in Kenya. *Global journal of health science*, 8(7), 218-227.
- Okech, T. (2017). Devolution of Public Health care Services in Kenya and its Implication on Universal Health Coverage, *IOSR Journal of Pharmacy*, 7(5), 09-23.
- Olubayo, O. (2014). Change management and its effects on organizational performance of Nigerian telecoms industries: Empirical Insight from Airtel Nigeria. *International journal of humanities social sciences and education*, *1*(11), 170-179.
- Osborne, W., & Waters, E. (2002). Four assumptions of multiple regression that researchers should always test. *Practical Assessment, Research, and Evaluation*, 8(1), 2-13.
- Otieno, M. (2016). Resources Allocation to Health Sector at the County Level and Implications for Equity, A Case Study of Baringo County. University of Nairobi, Kenya.
- Owino, D. (2014). Effectiveness of Quality Health care Strategies in Improving Service Delivery at the National Referral Hospitals in Kenya: published MBA project, School of Business, University of Nairobi, Kenya.
- Poston, B. (2009). Maslow's hierarchy of needs. *The Surgical Technologist*, 41(8), 347-353.
- Preker, A. S., Carrin, G., and Dror, D. M. (2002). Effectiveness of community health financing in meeting the cost of illness. *Bulletin of the World Health Organization*, 80(2), 143-150.
- Primary health care systems (2017): case study from Kenya, abridged version. Geneva: World Health Organization. Licence: CC BY-NC-SA 3.0 IGO.
- Quick, J., Jay, J., & Langer, A. (2014). Improving women's health through universal health coverage. *PLoS Med*, 11(1), e1001580.

- RKI. (2020). Coronavirus Disease 2019 (COVID-19) Daily Situation Report of the Robert Koch Institute.

  Retrieved from https://www.rki.de/DE/Content/InfAZ/N/Neuartiges\_Coronavirus/Situationsberic
- Rigii, G., &Ogutu, M. (2018). Strategic Leadership and Service Delivery Of County Governments: The Kenyan Experience, *International Journal of Economics*, *Commerce and Management United Kingdom*, 4 (11), 395-411.
- Sekaran, U., &Bougie, R. (2016). Research methods for business: A skill building approach. John Wiley & Sons. New Jersey.

hte/2020-06-12-en.pdf? blob=publicationFile

- Shukri, M., &Ramli, A. (2015). Organizational structure and performances of responsible Malaysian healthcare providers: A balanced scorecard perspective. *Procedia Economics and Finance*, 28(15), 202-212.
- Stubbs, T., Kentikelenis, A., Stuckler, D., McKee, M., & King, L. (2017). The impact of IMF conditionality on government health expenditure: A cross-national analysis of 16 West African nations. *Social Science & Medicine*, 174, 220-227.
- Thabethe, M. (2011). The impact of leadership in the acceleration of service delivery in the Department of Health and Social Development, Capricorn district (Doctoral dissertation). University of Limpopo, South Africa.
- Tsawe, M., &Susuman, S. (2014). Determinants of access to and use of maternal health care services in the Eastern Cape, South Africa: a quantitative and qualitative investigation. *BMC research notes*, 7(1), 723-729.
- Van de Ven, W. P. M. M., Beck, K., Buchner, F., Chernichovsky, D., Gardiol, L., Holly, A., Shmueli, A., and Schokkaert, E. (2000). Risk adjustment and risk sharing: the principles of stability and solidarity behind two health insurance reforms. *Social Science & Medicine*, 50(8), 1177-1188.
- Van Rossum, L., Aij, H., Simons, E., van der Eng, N., &Have, D. (2016). Lean healthcare from a change management perspective. *Journal of health organization and management*.30(3), 475-493.
- Wambua, M. (2017). The Effects Of Health Administrative Function On Service Delivery In Public Health Facilities In Kenya: A Case Study Of Kibwezi West Sub County, Makueni County (Doctoral dissertation, MUA).
- Wang, W., Loban, K., & Dionne, E. (2019). Public Hospitals in China: Is There a Variation in Patient Experience with Inpatient Care. *International journal of environmental research and public health*, *16*(2), 193-201.

- Wanjiru, K. (2014). Challenges in Provision of Universal Health Coverage by the National Hospital Insurance Fund, Kenya, Unpublished Thesis, University of Nairobi.
- Wayua, A. (2017). Factors Affecting Access To Maternal Health Care In Kenya: A Case Study of Machakos County (Doctoral dissertation, MUA).
- Wernerfelt, B. (1984). A resource- based view of the firm. *Strategic management journal*, 5(2), 171-180.
- Wong, C. A., Cummings, G. G., & Ducharme, L. (2018). The relationship between nursing leadership and patient outcomes: A systematic review update. *Journal of nursing management*, 26(7), 764-776.
- World Bank report (2014). Kenya Achieves Significant Results in Health Services Delivery. Available athttps://www.worldbank.org.
- World Health Organization (2014). Trends in Maternal Mortality: 1990–2013 Estimates by WHO, UNFPA, UNICEF and the United Nations Population Division. Geneva:
- World Health Organization (2015). Making fair choices on the path to universal health coverage: final report of the WHO Consultative Group on Equity and Universal Health Coverage.
- World Health Organization (2018). World health statistics 2018: monitoring health for the SDGs, sustainable development goals.
- World Health Organization (2020). Health systems financing: The path to universal coverage, World Health Report 2010. WHO: Geneva. World Health Report. World Health Organization.
- World Health Organization, UNICEF, UNFPA and the World Bank, (2020). Trends in Maternal Mortality: 1990-2010," Geneva.
- World Health Organization. (2009). Monitoring the building blocks of health systems: a handbook of indicators and their measurement strategies. World Health Organization.
- Zhang, Y., Li, J., Jiang, W., Zhang, H., Hu, Y., & Liu, M. (2018). Organizational structure, slack resources and sustainable corporate socially responsible performance. *Corporate Social Responsibility and Environmental Management*, 25(6), 1099-1107.

**APPENDICES** 

**Appendix I: Letter of Introduction** 

South Eastern Kenya University

School of Business and Economics

P.O. BOX 170-90200 Kitui, Kenya

Dear Sir/ Madam.

REQUEST TO COLLECT DATA FOR ACADEMIC THESIS RESEARCH PROJECT

To whom it concerns,

REQUEST TO COLLECT DATA FOR ACADEMIC PURPOSE

Dear Respondent,

I am a Master's student at South Eastern Kenya University undertaking a research on the topic 
"influence of organizational change on public health maternal health care service delivery 
in Kitui County". This is in partial fulfilment of the requirement for the award of the degree of master of business administration of South Eastern Kenya University. This study

intends to collect data from doctors, clinical officers, nurses and subordinate staff on organizational change and public maternal health care service delivery of which your health

facility is part of the selected study population.

Attached is a questionnaire, of which you're kindly requested to answer all the questions as specified. The information in the questionnaire shall be treated with utmost confidentiality and

utilized only for the purpose intended for, academic research only. A copy of the final report may

be made available to participants or tea firms upon request. Thank you for accepting to

participate in this study.

Thank you.

Yours faithfully

Marinah Syovinya Muteti

D61/KIT/20640/2015

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# **Appendix ii: Research Questionnaire**

This tool meant to collect data on the "influence of organizational change on public health maternal health care service delivery in Kitui County. "Information provided are for academic use only.

# **SECTION A: BIO DATA**

1.	Age of the health fac	ility in years
	Below 5	
	Between 6 and 10	
	Between 11 and 15	
	Above 16	
2.	Please indicate your s	sex; (tick)
	Female	
	Male	
3.	Educational Level:	
	Diploma	
	Graduate	
	Undergraduate	
4.	Present Position in th	e facility.
	Level 4 hospital offic	er□
	Laboratory officer	
	Midwifery	
	Nurse	
5.	Years of experience:	
	Below 5	
	6 to 9	
	10 to 13	
	Above 14	

# Section B: Leadership and public health maternal health care service delivery

6. Fill by ticking  $(\sqrt{})$  where best on the influence of leadership on public health maternal health care service delivery in Kitui County. Use the scale below.

	Statement	SA=5	A=4	N=3	D=2	SD=1
1	There are leadership strategies that interface					
	vision and delivering of services in this hospital					
2	The styles used by leaders in this hospital					
	incorporate mentorship programs that help the					
	personnel and other staffs in services					
	understanding					
3	Clear channels of correspondence through every					
	unit of the level 4 hospital have improved					
	powerful delivering of services					
4	The essential objectives including services					
	accessibility are adjusted to the purposes laid					
	out in the services delivery charter					
5	This hospital has distinct missions, followed by					
	all staffs and the managers					

7.	What are the most preva	lent leadership abili	ities tha	t healthcare	officia	als v	vithin that l	ospital
	demonstrate? Tick as m	any as you want.						
	Communication							
	Empathy							
	Listening & learning							
	Patient-oriented							
	Professionalism							
	Visionary							
8.	Make a list of the	other leadership	skills	displayed	by t	he	hospital's	health
	officers							

# Section C: Universal Health coverage and public health maternal health care service delivery

9. Fill by ticking ( $\sqrt{}$ ) where best onto observe the effect of universal health coverage on public health maternal health care service delivery. Use the scale shown.

	Statement	SA=5	A=4	N=3	D=2	SD=1
1	Comprehensive health services has been					
	accomplished in this hospital					
2	There is little or no limitation to patients'					
	accessibility of the hospital					
3	Most citizens can afford drugs in this hospital					
4	The hospital possesses a solid, effective and					
	operational arrangement of enhancing services					
	delivery					
5	The hospital has adequate capability of					
	competent health personnel familiar with					
	necessary quality of services outlined in the					
	service charter					

10. In what ways has UHC improved maternal l	health care? Select all of the services that apply
Access to after-natal healthcare	
Affordability of maternal services	
Excellent midwifery services are available	
Post-natal care	
Pre-natal care	

# Section D: Revenue allocation and public health maternal health care service delivery

11. Fill by ticking ( $\sqrt{}$ ) where best on influence of revenue allocation on public health maternal health care service delivery in Kitui County. Use the scale given.

	Statement	SA=5	A=4	N=3	D=2	SD=1
1	Various ways of financing health services					
	provided exist in the hospital					
2	Funds received from the government is					
	adequate to procure medical apparatus as well					
	as drugs					
3	There is timely release of money by the					
	national government to aid obtain health					
	facilities					
4	The required hospital facilities are timely					
	circulated by both levels of government					
5	Money from other organizations like WHO					
	enables the hospital procure more medical					
	equipment and drugs					

12. Do you be	elieve the county	and national	governments'	revenue	allocations	to	maternal		
health serv	ices are sufficient	? Explain							
Yes									
No									
If yes, plea	se explain								
If not, wha	If not, what are your options?								
			<del> </del>						

# Section E: Organizational structure and public health maternal health care service delivery

13. Fill by ticking ( $\sqrt{}$ ) where best on the influence of organizational structure on public health maternal health care service delivery in Kitui County. Use the scale where provided.

	Statement	SA=5	A=4	N=3	D=2	SD=1
1	There is clear allocation of responsibilities to					
	medical staffs in the facility					
2	The harmonization of purposes amid the					
	hospital and other medical agencies like					
	KEMSA and MoH is clear					
3	Labor, among other tasks are clearly					
	centralized in the hospital an occurrence that					
	has improved service delivery.					
4	The hospital has clear definite reporting policy					
	spanning all components of the facility plus the					
	maternity section					
5	Hospital departments are united with clear					
	communication channels with the maternity					
	division					

14. How are the hospital's organization struct	ture helping the delivery of high-quality maternal
health care? Select all of the services that	t apply.
Collaboration with other organizations	
Decentralization	
Tasks distribution	
Work centralization	

## Section F: Public health maternal health care service delivery

15. Select the appropriate degree of service delivery within that facility by checking (). Use the following scale: 5 = excellent, 4 = good, 3 = fair, 2 = poor and 1 = very poor.

	Statement	5	4	3	2	1
1	Health care that is comprehensive					
2	Coverage for medical expenses					
3	Health care facilities are readily available.					
4	In-hospital response to pregnancy emergencies.					
5	Pregnant women who visit the hospital are treated with dignity and					
	respect.					
6	Pre-maternal, maternal, and post-maternal care are all coordinated					
	by the healthcare facility.					
7	Support for birthing and visiting mothers, as well as patient-					
	centeredness					
8	This health facility's maternal health services are consistent.					

**END** 

# Appendix III: List of Public Hospitals in Kitui County

# LIST OF LEVEL IV HOSPITALS IN KITUI COUNTY.

S/NO	NAME OF HOSPITAL	
1.	Kitui County Referral Hospital	
2.	Ikanga Level IV Hospital	
3-	Ikutha Level IV Hospital	
4.	Kanyangi Level IV Hospital	
5-	Katulani Level IV Hospital	
6.	Kauwi Level IV Hospital	
7.	Migwani Level IV Hospital	
8.	Kyuso Level IV Hospital	
9.	Mutitu Level IV Hospital	
10.	Mutomo Level IV Hospital	
11.	Mwingi Level IV Hospital	
12.	Nuu Level IV Hospital	
13.	Tseikuru Level IV Hospital	
14.	Zombe Level IV Hospital	

Source: County Ministry of Health (2023)



Source: Kitui County Government (2023)

## **Appendix IV: Authorization Letter from the University**



## SOUTH EASTERN KENYA UNIVERSITY OFFICE OF THE DIRECTOR **BOARD OF POST GRADUATE STUDIES**

P.O. BOX 170-90200 EUTUR EUROYA

TEL 080-4218809 (KITU)

Our Ref: D61/KIT/20640/2015

DATE: 9th September 2020

Marinah Syovinya Muteti Reg. No. D61/KIT/20640/2015 Masters of Business Administration C/O Dean, School of Business and Economics

Dear Muteri

#### RE: PERMISSION TO PROCEED FOR DATA COLLECTION

This is to acknowledge receipt of your Master in Business Administration Proposal document entitled: "Influence of Organization Change on Public Health Maternal Health Care Service Delivery in Kitui County (A survey of Level 4 Hospitals in Kitui County)".

Following a successful presentation of your Masters Proposal, the School of Business and Economics Board of Examination in conjunction with the Perectorate, Board of Postgraduate Studies (BPS) have approved that you proceed on and carry out research data collection in accordance with your approved proposal

During the research work, you will be closely supervised by Dr. Susan Wamitu. You should ensure that you liase with the supervisor at all times. In addition, you are required to fill in a Progress Report (SEKU/ARSA/BPS/F-02) which can be downloaded from the University Website.

The Board of Postgraduate Studies wishes you well and a successful research data collection exercise as a critical stage in your Master of Business Administration.



Prof. David M. Malonza

Director, Board of Postgraduate Studies

Deputy Vice Chancellor, Academic, Research and Students Affairs (Note on File) Copy to:

Dean, School of Business and Economics

Chairman, Department of Business and Entrepreneurship

Director, Kitui Campus Dr. Susan Wamitu BPS Office To file

AND TO GREEN.

ISO 9001: 2015 CERTIFIED - TRANSFORMING LINES

## **Appendix V: NACOSTI License**

