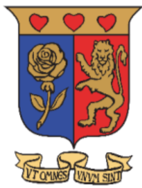

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THE EFFECT OF DEVOLVED GOVERNANCE ON THE DELIVERY OF HEALTH SERVICES IN WAJIR COUNTY, KENYA

ABUKAR SAMOW MOHAMED

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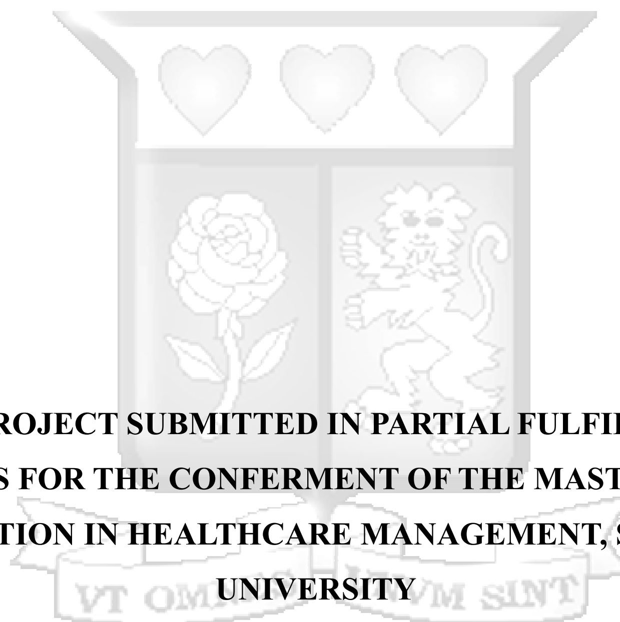

A RESEARCH PROJECT SUBMITTED IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE CONFERMENT OF THE MASTER OF BUSINESS ADMINISTRATION IN HEALTHCARE MANAGEMENT, STRATHMORE UNIVERSITY

MAY 2024

DECLARATION

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

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Sign… Date: May 25, 2024

Abukar Samow Mohamed

HCM/88889/15

This project of Abukar Samow Mohamed has been submitted for review with my approval as the University Supervisor

Sign…………………………………. Date: May 25, 2024

Dr. Joseph Onyango

Strathmore University

ABSTRACT

One of the key components of the Kenyan constitution is the concept of devolution which emphasizes the bringing of crucial services closer to people at the grassroot level. Devolved governance has been endorsed as a means of reducing inefficiencies when delivering healthcare services besides enhancing responsiveness to community needs. Wajir County was among the counties ill equipped to provide quality health services under the devolved governance structure. Even though studies had demonstrated the connection between devolved governance systems and improved delivery of services including healthcare, county governments in Kenya still grappled with inadequate capacity and resources to effectively deliver. Fewer current studies had been undertaken to examine the impact of devolved governance on health services in resource-deprived Arid and Semi-Arid counties such as Wajir. This study sought to address this gap by assessing the effect of devolved governance on the delivery of health services in Wajir County. The study determined the effect of devolved health staffing, devolved health financing and devolved hospital leadership/management on delivery of health services in Wajir County. The study was anchored on the systems theory and the theory of fiscal federalism. A convergent parallel research design was applied. Target population consisted of county health officials namely 33 county health management team members and 126 public health facility managers. 5 county health management team members were purposively sampled while a census of the 126 public health facility managers was taken. The primary data used was collected using an interview guide and a questionnaire. To analyze the data, qualitative and quantitative techniques were used. Data from interviews was analyzed using content analysis while quantitative data was analyzed through descriptive and inferential. A multiple regression model was used to show the relationship between the study variables. Qualitative findings were presented using narratives and appropriate verbatim quotes while quantitative findings were presented using charts and tables. The study established that devolved health staffing, devolved health financing and devolved hospital leadership/management positively and significantly affected health services delivery in Wajir County. Devolved hospital leadership/management was found to have the largest effect on the delivery of these services. The study therefore, concluded that devolved governance had a positive significant effect on the delivery of health services in Wajir County. Improved devolved governance would boost the delivery of health services in this county. Several recommendations for improvement were proposed. The study recommended that the county government should progressively increase funding to public health facilities. Increased budgets for recruitment of additional staff and facilitating their capacity development were also recommended. Formation of independent hospital management boards, institution of diversified motivation incentives for staff and adoption of efficient funds disbursement mechanisms that incentivized public health facilities to deliver quality and efficient health services were also recommended. It was expected that study findings would serve as a foundation for future studies.

TABLE OF CONTENTS

DECLARATION ..... **ii**

ABSTRACT ..... **iii**

TABLE OF CONTENTS ..... **iv**

LIST OF TABLES ..... **viii**

LIST OF FIGURES ..... **ix**

LIST OF ABBREVIATIONS AND ACRONYMS ..... **x**

DEDICATION ..... **xi**

ACKNOWLEGMENTS ..... **xii**

CHAPTER ONE: INTRODUCTION **1**

1.1 Background of the Study 1

1.1.1 Concept of Devolved Governance 1

1.1.2 Devolved Health Sector Governance in Kenya 3

1.1.3 Delivery of Health Services 4

1.1.4 Devolved Governance and Delivery of Health Services 5

1.1.5 Wajir County 6

1.2 Statement of the Problem 7

1.3 Objectives of the Study 8

1.3.1 Main Objective 8

1.3.2 Specific Objectives of the Study 8

1.4 Research Questions 8

1.5 Significance of The Study 8
1.6 Scope of the Study 9
CHAPTER TWO: LITERATURE REVIEW 10
2.1 Introduction 10
2.2 Theoretical Framework 10
2.2.1 Systems Theory 10
2.2.2 Theory of Fiscal Federalism 11
2.3 Empirical Literature Review 12
2.3.1 Devolved Health Staffing and Delivery of Healthcare Services 12
2.3.2 Devolved Health Financing and Delivery of Healthcare Services 14
2.3.3 Devolved Hospital leadership/ Management and Delivery of Healthcare Services 16
2.4 Summary of Literature and Research Gaps 18
2.5 Conceptual Framework of the Study 24
2.5.1 Operationalization of Study Variables 25
2.6 Chapter Summary 26
CHAPTER THREE: RESEARCH METHODOLOGY 27
3.1 Introduction 27
3.2 Research Philosophy 27
3.3 Research Design 27
3.4 Study Locale 28
3.5 Target Population 28
3.6 Sample Size and Sampling Techniques 28
3.7 Data Collection 29
3.7.1 Data Type and Source 29

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3.7.2 Research Tools 29

3.7.3 Data Collection Procedures...30

3.8 Pilot Testing 30

3.8.1 Validity of the Tools 30

3.8.2 Reliability of the Tools...30

3.9 Data Analysis 31

3.9 Ethical Considerations 32

CHAPTER FOUR: DATA ANALYSIS, FINDINGS AND INTERPRETATIONS 33

4.1 Introduction...33

4.2 Response Rate..33

4.3 Demographic Characteristics of the Respondents 33

4.4 Devolved Health Staffing 35

4.4.1 Aspects of Devolved Health Staffing in Wajir County 35

4.4.2 Perceived Effect of Devolved Health Staffing on Delivery of Health Services 39

4.5 Devolved Health Financing 40

4.5.1 Aspects of Devolved Health Financing in Wajir County....................................41

4.5.2 Perceived Effect of Devolved Health Financing on Delivery of Health Services ..43

4.6 Devolved Hospital Leadership/Management...44

4.6.1 Aspects of Devolved Hospital Leadership/Management in Wajir County 44

4.6.2 Perceived Effect of Devolved Hospital Leadership/Management on Delivery of Health Services 48

4.7 Delivery of Health Services in Wajir County 49

4.8 Correlation Analysis..52

4.9 Regression Analysis...54

4.9.1 Model Summary..54

4.9.2 Significance of the Regression Model 55
4.9.3 Regression Estimates 55
4.10 Chapter Summary 57
CHAPTER FIVE: CHAPTER FIVE: SUMMARY, DISCUSSIONS, CONCLUSIONS AND RECOMMENDATIONS 58
5.1 Introduction 58
5.2 Summary and Discussion of Findings 58
5.2.1 Devolved Health Staffing and Delivery of Health Services in Wajir County 58
5.2.2 Devolved Health Financing and Delivery of Health Services in Wajir County 59
5.2.3 Devolved Hospital Leadership/Management and Delivery of Health Services in Wajir County 59
5.3 Conclusions 60
5.4 Recommendations 61
5.5 Limitations of the Study 62
5.6 Suggestions for Further Research 62
REFERENCES 63
APPENDICES 68
Appendix I: Participant Informed Consent Form 68
Appendix II: Questionnaire for Health Facility Managers 70
Appendix III: Key Informants Interview Guide for County Health Management Team Members 75
Appendix IV: Ethical Approval from the University 77
Appendix V: Authorization Letter from the Department of Medical Services, Public Health and Sanitization, Wajir 78
Appendix VI: Research Permit from NACOSTI 79

Appendix VII: Research Project Budget....80
Appendix VII: Work Plan....81

LIST OF TABLES

Table 2.1: Summary of Literature and Research Gaps....19
Table 2.2: Operationalization of Variables....25
Table 3.1: Health Facilities in Wajir County....28
Table 3.2: Sample Size and Sampling Technique....29
Table 3.3: Reliability Test Results....31
Table 4.1: Successful Response Rate....33
Table 4.2: Demographic Characteristics of Public Health Facility Managers....34
Table 4.3: Descriptive Statistics on Devolved Health Staffing....36
Table 4.4: Descriptive Statistics on Devolved Health Financing....41
Table 4.5: Descriptive Statistics on Devolved Hospital Leadership/Management....45
Table 4.6: Descriptive Statistics on Delivery of Health Services in Wajir County....50
Table 4.7: Correlation Matrix....53
Table 4.8: Model Summary Results....54
Table 4.9: Model Significance Results....55
Table 4.10: Regression Coefficients....56

LIST OF FIGURES

Figure 2.1: Conceptual Framework of the Study 24

Figure 4.1: Perceived Link between Devolved Health Staffing and Delivery of Health Services 39

Figure 4.2: Perceived Link between Devolved Health Financing and Delivery of Health Services 43

Figure 4.3: Perceived Link between Devolved Hospital Leadership/Management and Delivery of Health Services 48

Figure 4.4: Devolved Governance Priority Areas as Proposed by Facility Managers 51

LIST OF ABBREVIATIONS AND ACRONYMS

ASALs Arid and Semi-Arid Lands

CT Computed Tomography

DANIDA Danish International Development Agency

HFMCs Health Facility Management Committees

HND Higher National Diploma

HSSF Health Sector Services Fund

KDHS Kenya Demographic and Health Survey

KHIS Kenya Health Information Systems

KSG Kenya School of Government

LMICs Low- and Middle-Income Countries

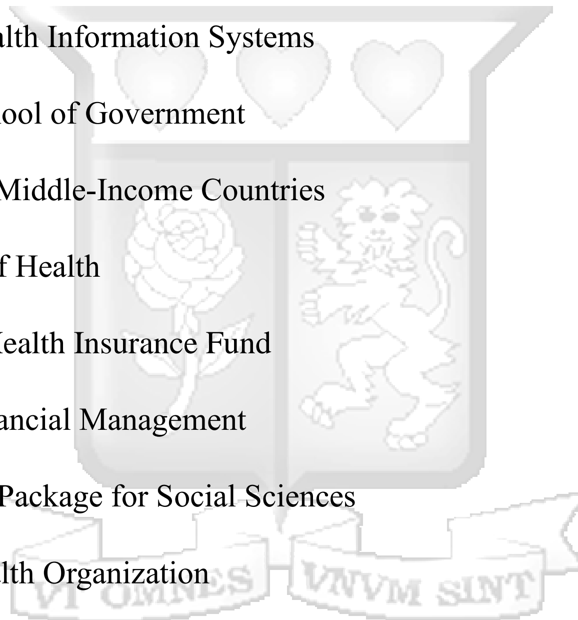
MoH Ministry of Health

NHIF National Health Insurance Fund

PFM Public Financial Management

SPSS Statistical Package for Social Sciences

WHO World Health Organization



DEDICATION

My loving family has been my rock throughout this process, and I am grateful to them. I dedicate my thesis to them. It is my sincere wish that this accomplishment satisfies their expectations of me.

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I would like to thank and appreciate my supervisor, Dr. Joseph Onyango for the insight, support and continued guidance all through this noble course. My appreciation goes to my family members as well for their motivation and in-kind support throughout my studies. I further wish to acknowledge the entire Strathmore University fraternity for providing a conductive environment for me to undertake my studies and facilitation provided in the course of writing this research.

CHAPTER ONE: INTRODUCTION

1.1 Background of the Study

Governance relates to rules of collective decision making in environments with a number of performers and actors (Carlson et al., 2015). Within the health sector space, the World Health Organization (WHO) has taken lead in introducing and pushing for health system governance. As such, the WHO's concept of governance includes strategic policy frameworks coupled with efficient supervision, laws and accountability (WHO, 2007). In the last few decades, health systems strengthening including health services delivery has gained momentum and as such governance has received increasing attention (Zhang & Ran, 2022). Governance in this case alludes to the structures and also the processes that are applied to regulate, direct and control health systems (Sheard, Clydesdale & Maclean, 2019) and notably, majority of players in the health field view it as a crucial factor in enhancing societal wellbeing through improved service delivery (Naher et al., 2020).

1.1.1 Concept of Devolved Governance

Decentralization of governance is rooted on arguments of political economy in that it brings about better delivery of public services (Azfar et al., 2018). Over the years as alluded by Makara (2018), many countries have embraced decentralization for various reasons key among them better delivery of public services including equity, improved governance, and accountability. Decentralization of governance is depicted in various forms and dimensions and the common forms are privatization, de-concentration, delegation and devolution (Mudalige, 2015). Devolution which is considered the strongest form of governance decentralization (Kimenyi, 2018) and it entails governments decentralizing functions and transferring authority to quasi-autonomous local government units with corporate status for decision-making, management and financing (Sakowicz, 2017).

Devolved governance according to Muchomba (2015) is whereby authority is restructured or reorganized for the purposes of ensuring that a system that enhances shared responsibility among governance institutions at all levels (central/national, regional and local) in line with the subsidiarity principle. Khaunya and Wawire (2015) also view devolved governance as transferring substantial powers, authorities and functions from national governments to the local governments where financing is then disbursed to support their operation or functionality just like the central governments. Raikes (2020) asserts that devolved governance has been

embraced in many nations as the basis for development reforms where the significance of devolution exceedingly supported and dependent on the political economy to enhance service delivery. It is observed by Smoke (2015), Chikwawawa (2019) and Thuku (2020) that most of the nations in the developing and developed world have adopted devolved governance so as to improve public service delivery and management of public resources besides enhancing their accountability for resources disbursed to enable greater economic development and equity in service delivery.

Within the health sector, devolved governance has been considered a way of addressing the political, management and also the operational issues that impact the cost as well as the systemic effectiveness of health systems (Njiru, Tenambergen & Oluoch, 2018). Politically, devolved governance is likely to ensure that citizens' concerns at the grassroot levels are reflected and addressed (Dickovick & Wunsch, 2015). From a managerial point of view, devolved governance is seen as a means of minimizing bureaucracies and red tapes that are usually linked to lengthy implementation of decisions made by central governments (Caiden, 2019). With regards to the operational perspective, Kangu (2015) notes that decision-making ought to be swift and must happen closer to the place of work so that leadership/managerial quality is enhanced and the morale of staff boosted.

Kimathi (2017) highlights devolved governance within the health sector touches on several building blocks of the health system namely healthcare funding and leadership, healthcare products and technologies, healthcare information and personnel, service delivery systems as well as healthcare infrastructure. To this end, this study focuses on include devolved healthcare financing, devolved health staffing and devolved health leadership at the facility level. Devolved healthcare financing as opined by Kairu et al. (2021) involves transferring powers for planning, managing and making decisions around financial resources for health from the centre to the sub-national level. Indiazi (2021) also views it as the process whereby the funds needed by public health facilities in a devolved system are disbursed to them to enable them carry out their operations effectively.

Devolved health staffing is described by Masaviru, Namusonge and Nambuswa (2021) as the process where central governments transfer the authority to carry out various health staffing functions such as the recruitment and firing of staff, defining the compensation packages, management transfers, promotions, and sanctions; skills mix and training to governments at lower levels. This according to Simiyu and Moronge. (2015) is aimed at increasing

governments' responsiveness to conditions at the local level including the needs of patients and boosting the availability of healthcare staff. Devolved hospital leadership or management involves central governments transferring authority to carry out core functions of healthcare administration (Muchomba, 2015). These functions include the management of human resources, preparing financial plans and reports as well as managing health facilities and crucial equipment at a healthcare facility to independent units at the local or subnational level.

1.1.2 Devolved Health Sector Governance in Kenya

Under the Kenyan constitution, health governance in Kenya takes place at two levels under the devolved system; the national level and the county level (Tsofa et al., 2017). The Ministry of Health (MoH) is mandated to ensure oversight and management at the national level, while county health agencies are required to coordinate and handle healthcare service delivery at the county level (McCollum et al., 2018). These two levels of government are required to work together to accomplish the governance as well as the managerial goals as delineated in the 2014-2030 Kenya Health Policy (Ministry of Health, 2014).

This said health policy includes seven policy directions: health governance, health funding, healthcare products and technologies, healthcare workers, healthcare information, service delivery and healthcare infrastructure (Kimathi, 2017). Devolving health services enables county governments to initiate innovative services that match their distinctive health requirements and gives them sufficient ability to identify key priorities for their healthcare systems as well as the ability to make independent decisions or choices regarding how resources are allocated and how funds are spend (Yarow, Jirma & Siringi, 2019).

Under the devolved system in Kenya as expounded by Masaba et al. (2020), health care services are delivered in a four-tiered system: community level health services, primary health services, county health services and the national health services. The county governments have responsibility over the first three levels while the national services are under the control of the national government (Chege et al., 2020). Health services are generally run by MoH with different departments at the county level, based on the county's particular requirements (Wachira, Nassiuma & Kurgat, 2022). Community participation is a top concern within these new structures and since the roll-out of the Community Health Strategy (MoH, 2006), which has been a cornerstone of Kenya's health care system.

Healthcare facilities are managed by health facility management committees (HFMCs) elected at the local level in accordance with sound public involvement supported by devolution (Pyone,

2017). These committees work side by side with county health management teams which represent communities in the management of healthcare at the county-level (Kairu et al., 2021). The six key components of healthcare systems ensure that these systems are strengthened in diverse ways. Some overarching constituents like healthcare leadership or governance and healthcare information systems play a crucial role in laying the foundation for the general policy and regulation of all the other components (Miriti, 2016). Major input building blocks of healthcare systems comprise of notably, the funding of healthcare and the personnel (Wanzala & Oloo, 2019; Masaviru, Namusonge & Nambuswa, 2021). The third category of components comprising of medical products and technologies as well as the delivery of healthcare services reflect rapid healthcare systems' outputs like the distribution of healthcare and its availability (Wagana & Iravo, 2017). This research concentrated on three key components of health systems (staffing, hospital leadership/management, and financing).

Leadership has changed at the county. Leadership change has also provided the foundation of the general policy and regulation of all the other components of health systems (Andrew, 2020). In terms of financing, after the 2013 implementation of the constitution, health management funds were devolved to the counties and therefore the county governments did not need to depend on national government funding to improve on health infrastructure and service delivery (Rufo, 2019). The money was now availed to the county leadership to plan on how to invest in the health sector. Lastly the recruitment and promotion of healthcare staff was devolved and delegated to the County Public Service Board which ensured that the staff who applied to work in Wajir were working on choice and therefore were more motivated to stay in the county. Previously, because of the hardship nature of the county, those transferred by the national government to Wajir would not stay for long since they sought transfers to other counties. This research sought to explore the effects of devolved governance on the delivery of health services in Wajir County.

1.1.3 Delivery of Health Services

Health services delivery is viewed as a multidimensional concept which is not only complex but also subjective (Weaver, Coffey & Hewitt, 2017). Delivery of health services is defined by Mosadeghrad (2014) as consistently pleasing to patients by offering them services which are not only efficient but also effective in line with the newest guidelines and standards and which meets their needs and also makes the providers fulfilled. Health service delivery can also be described as offering services which better the health wellbeing of persons who seek these

services (El Arifeen et al., 2013). There are various attributes which characterize the delivery of healthcare services such as availability, accessibility, affordability, responsiveness, timeliness and confidentiality (Handayani et al., 2015). Scholars around the world have operationalized health services delivery in diverse ways. Donabedian (2016) conducted a pluralistic evaluation whose aim was to establish various characteristics of healthcare services delivery. This evaluation was able to identify 182 characteristics of health services delivery and were grouped in to five categories namely efficacy, efficiency, effectiveness, empathy and environment. The delivery of health services in Wajir County was operationalized in terms of availability, timeliness, quality, accessibility, and patient satisfaction.

1.1.4 Devolved Governance and Delivery of Health Services

Devolved governance has been endorsed as means of reducing inefficiencies in healthcare service delivery and increasing response to the needs of the community (Mohammed, North & Ashton, 2016). Mixed outcomes have however been noted in different countries. Muñoz et al. (2017) established that devolved governance has had positive implications for health services delivery in many low- and middle-income countries (LMICs). In England, Britteon et al. (2022) associated devolution with better health outcomes especially increased life expectancy and reduced inequalities in the access of health services that were usually apparent in the areas with the highest income deprivation. Using data from Indonesia, Cahyaningsih and Fitrady (2019) noted that decentralization had not led to significant improvements in health outcomes due to among others obscurity in allocating and distribution core functions the central and local governments, unqualified or unskilled personnel, fraudulent and unchecked expenditures at the local level.

In Ethiopia, the adoption of devolved governance since 1996 has led to sustained significant improvement in health services delivery despite the hurdles faced at the initial stages (Soila, 2015). On the contrary, in Uganda, stagnation or worsening of most health indicators was reported as a result of inadequacies in financial and human resources despite adoption of devolved governance since 1997 (Wanzala & Oloo, 2019). In Tanzania, Kigume and Maluka (2018) reported that while health sector decentralization was a positive reform, it would only enhance health services delivery when there is a suitable amount of discretion together with sufficient institutional capacity to facilitate the exercise this discretion.

In Kenya, several studies among them Thuku (2020) observed that while county governments have overtime established structures and progressively built capacity for health services

delivery, several challenges such as underfunding and understaffing have been a hindrance to provision of optimal health services in these units. Masaba et al. (2020) argued that though there were improvements in the health structural development as result of devolution, in the post devolution era, inadequate resources/funds from the national government and understaffed health facilities continue to hinder efficient service delivery. The authors recommended the allocation of resources to counties commensurate with the devolved functions.

Savala, Omoro and Kinyua (2022) also noted that while devolution significantly altered the flow of resources via the health-care system, granting county governments far more authority and discretion over health-care spending, the financing of devolved healthcare had however not been adequate and this directly impacted of health services delivery. The above observation was also reiterated by Kubai (2019) who asserted that funds channelled to public health facilities were insufficient due to the inadequate allocation, which had a direct influence on the health services delivery. The author also added that there were delays in the provision of the funds leading to inefficiencies in operations of these health facilities.

1.1.5 Wajir County

Wajir is one of the ASAL counties in Kenya and majority of the residents practice pastoralism as their mainstay. The life expectancy of Wajir County population was estimated at 42 years and 44 years for male and female respectively. According to Kenya Demographic and Health Survey (KDHS) 2014, the crude mortality was at 9.3/1000 while the neonatal mortality rate was at 24/1000. The infant mortality rate was at 37/1000 while the under five-year mortality rate was at 44/1000. Wajir County was among the 15 Counties that accounted for more than 60 percent of maternal deaths in the country, and it is estimated that the county's maternal mortality rate was 1683 deaths per 100,000 livebirths. The county also had witnessed several cases of malnutrition and stunting majorly among children less than 5 years. These poor health indicators had been linked to among other inaccessible healthcare facilities lacking the necessary equipment and medical supplies (Wajir County Health Sector Annual Performance Review Report, 2018/2019).

The right to access of healthcare services by all is among the key provisions of the current constitution of Kenya. As such, there was a need to carry out an investigation in to the effect of devolved governance on delivery of health services in the context of Wajir County. The study would expand literature on devolved governance and health services delivery. It would also add insights into the current status of devolution and health services delivery in Kenya's ASAL

counties. Moreover, the findings would provide recommendations that would have policy implications for decision making in delivery of health services as a fundamental part of strengthening the county's health system.

1.2 Statement of the Problem

Kenya like many other democracies, has since 2013 embraced devolved governance with one of the key intentions being to enhance efficiency in service delivery in different sectors (Mugo et al., 2018; Njiru, Tenambergen & Oluoch, 2018). With reference to the health function, there has been considerable encouraging accomplishments in the delivery of key services following the establishment of county governments (Masaba et al., 2020). In Wajir County, the County Integrated Development Plan 2018-2022 highlighted that accessibility and utilization of healthcare services had increased citing reduced doctor to population ratio from 1:132,000 during pre-devolution to the current 1:23,694 besides tremendous improvements witnessed in the number of deliveries undertaken with the assistance of trained healthcare practitioners from 17% to 37.7% (County Government of Wajir, 2018). Increased availability and access to child health vaccination and emergency, rescue and evacuation services were also reported.

Improved health service delivery outcomes in Wajir County were also depicted by the data from the Kenya Health Information Systems (KHIS) which revealed that aside from deliveries conducted by skilled birth attendants increasing from 41.6% to 46.5% for the period 2017 to 2021, patients were able to receive various specialized services such as CT scans, intensive care, dialysis and diagnostics (Ali & Naikumi, 2022). Regrettably, the above heath service delivery milestones made seemed to be watered down by various constraints associated with devolved health governance and there was much more that needed to be done to achieve optimal service delivery just as it was in other counties (Bigambo & Keya, 2022).

Delayed and irregular allocation of funds often times had been seen as having the capacity to cripple the provision of essential services in the county (Or & Nyaga, 2018). Workers fleeing to other counties due to insecurity cases for instance and stalling of vital vaccinations and disease prevention programs had contributed to the rating of the condition of health service delivery still among the worst despite significant milestones (Yussuf & Subbo, 2019). Therefore, there was still need for extensive research on the implications of devolved governance on health service delivery in Wajir County so that changing dynamics could be identified for informed interventions.

Review of literature showed that study of the effect of devolved governance on health services delivery in Wajir County was not exhaustive and that available relevant studies were not current as many were mostly carried out in the first five years of transition to devolution. Hence, the prevailing condition in the county needed to be assessed. Mixed findings in relation to the influence the components of devolved governance had on health services delivery in counties had also been observed. This study therefore investigated the effect of devolved governance on delivery of health services in Wajir County. Wajir County was considered in this case as it was an exemplar of hard to reach and also hard to work in ASAL region where findings could be replicated in similar counties facing considerable challenges in the delivery of health services.

1.3 Objectives of the Study

1.3.1 Main Objective

The main objective of this study was to investigate the effect of devolved governance on delivery of health services in Wajir County, Kenya.

1.3.2 Specific Objectives of the Study

i. To determine the effect of devolved health staffing on delivery of health services in Wajir County, Kenya.
ii. To examine the effect of devolved health financing on delivery of health services in Wajir County, Kenya.
iii. To establish the effect of devolved hospital leadership/management on delivery of health services in Wajir County, Kenya.

1.4 Research Questions

i. How did devolved health staffing affect delivery of health services in Wajir County, Kenya.
ii. How did devolved health financing affect delivery of health services in Wajir County, Kenya.
iii. How did devolved hospital leadership/management affect delivery of health services in Wajir County, Kenya.

1.5 Significance of The Study

The study was of significant value to the following stakeholders.

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The National Government: The study's findings would enlighten the policymakers at the national level on the status of devolved health governance and delivery of health services at the county level. This would help the government to make important policy decisions regarding health service delivery in county governments.

The County Government Management: The study would benefit the management of the County Government of Wajir primarily because the study addressed critical issues on devolution and health service delivery. The study findings might also inform the county's department of health on whether devolution of health had improved the delivery of healthcare services as was envisioned in the constitution. The study would also provide important information that would be useful to other county governments in ASAL regions since they had common challenges.

Future scholars and academicians: The study would make important contributions to the research body that focused on devolved governance and health services delivery in developing countries. Future scholars on the area of devolution and health service delivery would have access to an important piece of literature from this study.

1.6 Scope of the Study

The study investigated the effect of devolved governance on delivery of health services in Wajir County. Since the concept of devolved governance was quite broad, this study only focused on devolved health staffing, devolved health financing and devolved hospital leadership/management and how they affected service delivery of healthcare services in the county. The three variables had been chosen because of their significant change after devolution. The study employed a mixed methods research design. It targeted key county health management team members and public health facility managers of the 126 public health facilities spread out in the eight sub counties in this county. A census of the facility managers was taken since with their smaller number; it was manageable to reach them with the help of research assistants. The study was carried out in January 2024.

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CHAPTER TWO: LITERATURE REVIEW

2.1 Introduction

In this chapter, available literature on devolved governance and the delivery of health services was reviewed. The first subsection outlines the theories which underpinned the research. Empirical past studies were then reviewed and the research gaps noted summarized. This chapter also contains the conceptual framework and a summary of how the different study variables were operationalized. A chapter summary was thereafter provided.

2.2 Theoretical Framework

This research study was underpinned on the systems theory and theory of fiscal federalism.

2.2.1 Systems Theory

This theory was originally advanced by Ludwig von Bertalanffy in the 1940s (Arnold, 2013). It is noted by Lai and Huili (2017) that a system is made up of several parts which are integrated to enable the realization of a general goal or objective. Removing any part of the system alters its nature. This theory, as asserted by Clayton and Radcliffe (2018), argues that a system is as well open, always interacting with its immediate environment. It also emphasizes that a system can be viewed as having in place inputs (for instance, funds, people, supplies and technologies), processes such as planning and controlling, outputs which can either be products or services as well as outcomes for example, improved quality of life for clients (Luhmann, Baecker & Gilgen, 2013). Systems usually enable the sharing of feedback among each of the above-mentioned key system components (Coetzee & Van Niekerk, 2012).

Based on the systems theory approach, any entity usually relies on its supporting environment for sustained inputs towards ensuring that it remains sustainable and processes the said inputs via repeated and fashioned activities and people interactions to produce desired outputs (Kühl, 2013). The applicability of this theory to this research study hinged on its ability to clarify the role of devolved health financing, staffing and hospital leadership on the delivery of health services. The devolved healthcare system in Wajir County was composed of several components and impacted by many factors which ought to be taken in to account as whole so as to improve the delivery of crucial healthcare services. This theory anchored devolved health financing, devolved health staffing and devolved hospital leadership/management as factors that needed to be taken in to account as part of the devolved healthcare system in Wajir County and not in isolation towards enhanced delivery of health services.

2.2.2 Theory of Fiscal Federalism

This theory is linked to Oates (1972) and is founded on the premise that some goods and services are distinctively suited for particular regions and therefore, it is possible to efficiently provide them if the power to raise revenues and authority in planning and incurring expenditure is shifted to regional/sub national levels. This theory puts forth an argument that the formulation of both policies and strategies is meant at providing public goods/services and that human capital needs ought to be aligned to the conditions prevailing at the regional and local levels so that their effectiveness in realizing the desired objectives is enhanced when compared to the ones whose determination and implementation is undertaken at the national/central level and which usually tend to ignore various geographical, cultural and religious differences (Oates, 2005; Oates, 2008).

The supporters of this theory as highlighted by Chandra (2015), normally assume that subnational governments have the necessary capacity required in achieving enhanced levels of productivity efficiencies so that any form of wastage is avoided and innovations relevant to the regions created. Faguet (2014) however gave a critique arguing that decentralization can be quite expensive as a result of diseconomies of scale. Smith (1985) also contends that subnational governments have a tendency of lacking sufficient resources may it be human, technical or financial to a point they are not able to adequately provide the required goods and services to the citizens.

This theory was relevant to this research study which sought to establish whether devolved governance operationalized in terms of devolved health financing, devolved health staffing and devolved hospital leadership/management significantly impacted the delivery of health services in Wajir County. It divulged the merits of devolving authority and functions to governments at the lower level and also the clear relationship between a county government and residents or beneficiaries. It was expected that devolved governance in terms of devolved health financing, devolved health staffing and devolved hospital leadership/management would result to enhanced health services delivery in facilities within devolved units' due to its ability to address the managerial, operational and political issues that adversely affected the performance of health systems.

2.3 Empirical Literature Review

In this section, past studies undertaken in relation to the effect of devolved health staffing, devolved health financing and devolved hospital leadership/management on the delivery of health services were outlined.

2.3.1 Devolved Health Staffing and Delivery of Healthcare Services

According to Li and Cimiotti (2021), staffing is among the most basic foundations for efficient healthcare service delivery as healthcare systems cannot operate without it. Offering capacity development as argued by Thuku (2020), will enhance the competencies and capabilities of healthcare staff and when coupled with proper motivational incentives, better service outcomes can be expected from them. It was evident from the reviewed studies that devolved staffing had implications for healthcare services delivery in various county governments. The general emphasis across all the studies was the challenges of staff shortages, capacity building and demotivation. In most of these studies, however, the actual effect of devolved staffing on health services delivery was actually not quantified.

By conducting a literature review, Masaba et al. (2020) examined the devolution of the healthcare system in Kenya where the progress made and the challenges faced were determined. Inadequate staffing was reported as a major challenge. The study underscored that even though devolution resulted to the employment of extra new healthcare personnel, the staff available were still inadequate resulting to long working hours. The study also found that staff allowances were not harmonized in all counties and persistent delayed payments were a cause of demotivation among healthcare staff. The study established that poor and untimely staff payments culminated to frequent strikes which paralyzed operations in public hospitals, making access to optimal services impossible.

Focusing on healthcare facilities in Nairobi County, Gimoi (2017) also examined how devolution impacted healthcare systems. A descriptive survey research design was used. The study established that devolution had not addressed the challenge of shortage of health workers in these facilities and hence, the available personnel were strained. Also, only a few facilities had in place mechanisms or incentives for motivating health workers. Consequently, the majority of the personnel remained unmotivated. The study observed that inadequate and strained healthcare workforce in the targeted facilities contributed to reduced quality of the services delivered. Moreover, demotivation led to the tendency of health workers seeking alternatives of supplementing their incomes and this led to poor and biased health services.

In their study, Masaviru, Namusonge and Nambuswa (2021) determined how the delivery of public health services in Kenya was influenced by devolved human resource governance structure. The research used a mixed methods research design and was specifically undertaken in Trans Nzoia County. The study found that devolved management of human resources significantly influenced the delivery of healthcare services in the said facilities. The study called for recruitment of adequate healthcare staff and continuous capacity development based on needs assessments to boost their capacity. The study underscored that understaffing in devolved public health facilities resulted to overworking among health workers which reduced their efficiency, resulting to poor service delivery.

While assessing the impact of devolution of health services in Makueni County, Wanjohi (2019) argued that the health sector under devolution faced critical brain drain due to arising conditions at the county level. The study also pointed out the overconcentration of critical staff in hospitals at higher levels leaving the facilities at the lower levels without vital staff yet they were the most accessed by nearly 70% of citizens. This resulted to overworked health personnel which affected service quality due to reduced personnel efficiency. The observations made by Wanjohi (2019) were also reported in the study undertaken by Muwonge et al. (2022) on how devolution can be used to boost improvements in the delivery of crucial health services in Kenya. This study noted that counties had maintained and, in many cases, significantly expanded the levels of, and access to service delivery in healthcare. Nonetheless, despite the increased in the number of employed health personnel, staff shortages, absenteeism and demotivation persisted lowering quality of healthcare services delivered. The argued that primary health facilities remained poorly staffed when compared to Levels 4,5 and 6 hospitals. This study adopted a descriptive research design.

Ntayia and Moi (2022) study on the implications of devolution for healthcare human resources' management in Kajiado County reported that devolution had facilitated the recruitment of qualified healthcare staff possibly from among the locals. The study established that the personnel available were not only experienced but also adequately skilled to handle the very demanding healthcare needs in the county. Nonetheless, the study underlined that devolution was associated with staff that were demotivated as a result of managerial inadequacies, lack of sufficient opportunities for personnel training and development and poor compensation. The study pointed out that regular training of critical human resources as recommended in the medical profession was a challenge in this county. Moreover, motivating and encouraging staff

to deliver the best services and offering better renumerations was lacking. Prioritizing and addressing the issues raised by health workers efficiently and on time was also wanting.

Anampiu (2020) assessed the factors which influenced the delivery of healthcare services at the Sub-County hospitals in Meru County. Using a descriptive research design, the study established that staffing factors namely training, compensation and motivation of healthcare staff positively and significantly affected the access to quality and efficient health services in these facilities. The study noted that continuous training of healthcare workers boosted their skills and this enabled their provision of better and superior health services. Moreover, offering health personnel competitive compensation packages alongside other incentives ensured that employees were motivated to offer standard services.

2.3.2 Devolved Health Financing and Delivery of Healthcare Services

Wanzala and Oloo (2019) conducted a literature review regarding role of devolution in healthcare services delivery. The study reported that challenges of funding was a major hindrance to efficient health services delivery in Kenya. The study pointed out that delayed funding of healthcare facilities by county governments resulted to delayed staff payments and as a result, every now and then, health workers strikes were witnessed. Such strikes according to this study constrained accessibility to medical services and eventually, cases of patient deaths were recorded. The study also found that due to inadequate funds, various health indicators such as maternal mortality remained high in several counties. The study further noted that embezzlement healthcare funds and rising corruption cases in county governments had contributed to delayed completion of different healthcare projects which hindered the delivery of healthcare services.

The observations made by Wanzala and Oloo (2019) were also reported in the study undertaken by Rufo (2019) and which focused on the influence that devolution had on the delivery of healthcare services in Tharaka Nithi County, particularly the Chuka General Hospital. Applying a descriptive survey research design, the research observed that after devolution, the financing of health services in this facility was not adequate. Moreover, the finances available to this facility were not disbursed on time and such delays negatively impacted normal hospital operations resulting to delayed service delivery. Delayed financing as reported in this study also resulted to delayed supply of medical supplies and equipment, forcing patients to hunt for the relevant services in other healthcare facilities.

The assessment of the effect devolved healthcare system had on the delivery of health services in Meru County by Njiru, Tenambergen and Oluoch (2018) revealed that devolved healthcare financing positively and in a significant manner influenced health services delivery in this county. Using a descriptive survey research design, the study found out that adequate financing of healthcare facilities within the devolved governance structure was needed in facilitating the seamless execution of hospital operations without halt. Moreover, it affected the quality of healthcare services delivered by ensuring that the finances required in procuring medical supplies, renumerating workers and also supporting the sustainability of health facilities were available. Just like the studies carried out by Wanzala and Oloo (2019) and Rufo (2019), this study unearthed that the funds disbursed to healthcare facilities in Meru County were neither timely nor sufficient enough to meet hospital budgets resulting to poor service delivery and undesired health outcomes.

Indiazi (2021) also determined the implications of devolved healthcare financing on public health services delivery in Western Counties. The study employed a descriptive research design. Its findings revealed that devolved healthcare financing substantially enhanced health services delivery in these facilities. The study found that the financial resources allocated to these facilities were not adequate to meet the budget requirements and enable adequate staffing of all departments. With insufficient funds, it had become difficult to adequately renumerate in different positions. Untimely and unequitable disbursement of funds to the healthcare facilities considered was also pointed out in this study. Regular staff training and development in these facilities was also constrained by the inadequate funds received. Lack of adequate funding also resulted to stock out of crucial medical supplies and equipment. All the above adversely affected accessibility of and quality of healthcare services in the studied health facilities.

Focusing on constraints witnessed in the devolved health care sector in Kenya, Kimathi (2017) underscored that there were inconsistencies in funds allocations to healthcare facilities in counties which stalled critical functions further creating inefficiencies in health services delivery. The study cited the case of Health Sector Services Fund (HSSF) allocations which were received by facilities only or twice annually yet the funds needed to be disbursed each and every quarter. This disrupted the operations of facilities as the funding was largely for running the daily operations of the facilities and catered for emergencies which arose. The study further observed that delayed disbursements of funds to public health facilities in counties resulted to recurrent strikes due to salary delays and lack of critical medical supplies in facilities, culminating to poor service delivery. A literature review approach was used.

While examining health purchasing at the county level in Kenya, Mbuthia et al. (2019) noted that some public financial management (PFM) rules had been a hindrance to the provision of improved quality of healthcare services as facilities lacked financial autonomy over the revenues they generated. The study underlined that the creation of single-county revenue funds caused healthcare facilities to lose financial autonomy resulting to perverse incentives. The study argued that with this reform, public facilities were not able to take part in making purchasing decisions and personnel were demoralized. Moreover, the reform encouraged health providers to illegally spend user fees while others were discouraged from nursing NHIF members. The study concluded that under devolved healthcare financing, a certain level of financial autonomy at the facility level was required as it resulted to improved quality of services, made service provision efficient, it facilitated equitable resource distribution and also ensured that accountability was maintained in these facilities. The research highlighted that towards achieving this, some counties had enacted and passed laws that would allow public health facilities to retain and use their generated revenues. The study combined literature review with document analysis as the research approach.

The investigation of health facility financing in Kenya in the devolution context by Kairu et al. (2021) also reiterated that the PFM Act (2012) requiring that the remittance of all county revenues to a centralized account constrained the financial autonomy of public health facilities. As a result of limited financial autonomy, hospitals suffered procurement delays as it was a requirement that procurement requests would be channeled to the county health departments which undertook the procurement on the hospitals' behalf. This adversely impacted the delivery of services. The study also established that with limited financial autonomy, the motivation for healthcare facilities to do follow-ups on National Health Insurance Fund (NHIF) claims that were not paid was reduced. In tackling the issues of financial autonomy, the study observed that some of the counties had in place county level laws providing for ringfenced funds for hospitals that enabled the facilities to utilize the funds at source. The study applied a mixed methods research design and was undertaken in five purposively selected counties.

2.3.3 Devolved Hospital leadership/ Management and Delivery of Healthcare Services

Muchomba (2015) examined how devolved governance influenced Kenya's healthcare sector performance taking a survey of health facilities in Nairobi and Mombasa County. The study found that devolved organizational leadership significantly influenced how the overall health sector in these counties performed in terms of patients' satisfaction levels and quality of

services provided. The study noted that devolved hospital management enabled faster decision making which facilitated the necessary strategic change in hospitals. It also facilitated efficient hospital development planning and access to hospital leaders or managers, a factor that enhanced communication and feedback on health facilities issues, informing improvement of services for better performance.

Kimathi (2017) explored the challenges faced in Kenya's devolved heath sector. The study applied a comparative study approach where lessons from other countries with similar healthcare systems were taken in to account. The study established that the administration of healthcare facilities in counties was a critical challenge. The study underscored that as a result of serious capacity hurdles, facilities' management was left in the hands of healthcare staff. The study argued that while these personnel had extensive technical and professional expertise, most of them lacked sufficient strategic management skills needed in accessing and prudently using the resources available besides mitigating against the challenges associated with devolved health systems.

Baraza et al. (2017) studied the recentralization within decentralization in Kenya's healthcare system focusing particularly on county hospital autonomy under devolution. This was a qualitative study undertaken in three Kilifi County hospitals. The study observed that devolution had led to reduced hospital autonomy which weakened hospital leadership and management structures. The study highlighted that hospital management teams and executive expenditure committees became dysfunctional due to the reduced hospital autonomy. For instance, though hospital management teams existed in these hospitals, their powers more so where financial management was concerned had reduced after devolution. Their decisions needed to be approved by the county health department. Another case singled out in this study was the reduced control over availed resources by the office of medical superintendent. The study argued that transferring the functions of hospital committees to county health department led to increased bureaucracies which delayed decision making and this adversely affected the quality of health services provided.

Njoroge and Moi (2020) evaluated the implications of devolution for healthcare management in Gatanga Subcounty, Murang'a County. A survey research design was used. The study determined that devolution improved the administration of health facilities in the subcounty. It pointed out that following devolution, healthcare facility managers/administrators were able to make more independent management choices at the heart of the rest of the healthcare staff and

patients. Devolved hospital management was also linked to improved communication between hospital administrators and staff in other levels resulting to improved service delivery.

The study by Njiru, Tenambergen and Oluoch (2018) and which focused on delivery of health services in Meru County established a positive significant relationship between sound devolved hospital leadership and improved health services delivery. The noted that the management of the healthcare facilities surveyed were competent in overseeing the operations of these facilities. Nonetheless, concerns of lack of transparency and openness in hospital administration coupled with politically influenced decision making processes and managing of expended funds were found to constraint optimal service delivery. Kubai (2019) also emphasized the need for hospital management in devolved healthcare systems to be steered by individuals who were competent, focused and performance oriented.

Andrew (2020) study on how devolution impacted the performance of health care systems in Kiambu County revealed that devolved leadership at county level positively and significantly affected performance of these systems as measured by efficiency in service delivery. The study associated devolved leadership with easy and efficient determination of healthcare facilities performance within the county. The study also noted that such kind of leadership allowed the county government to make its own plans, design innovative models and interventions to deal with problems facing its facilities. According to this study, devolved leadership was well suited in meeting the unique needs of the health sector in this county in their context besides providing adequate scope to determining citizen priorities and making independent swift decisions on how resources would be mobilized, allocated and spent and the resultant management concerns. Devolved leadership according to this study significantly enhanced the execution of health sector development plans in healthcare facilities besides offering support, empathy and fair healthcare services in all facilities within the county. The study used a descriptive survey design where public hospital managers were targeted.

2.4 Summary of Literature and Research Gaps

Table 2.1 provides a summary of the research gaps noted in the reviewed studies.

Table 2.1: Summary of Literature and Research Gaps

Author/Year	Focus of Study	Findings	Research Gaps	How Current Study Addresses Identified Research Gaps
Masaba et al. (2020)	Determined the progress and challenges faced in Kenya's devolved health system	Staff available in public health facilities were inadequate leading to overworking. Staff allowances were also not harmonized across all counties and payments provided were considered poor and untimely. All these culminated to frequent strikes which paralyzed operations in public hospitals, making access to optimal services impossible.	Methodology gap- the study applied a literature review approach and hence no relationships could be determined Population gap- this study looked at the nation's health system in general. Hence, it was difficult to depict the particular situation in a given county.	The study determined the effect of devolved health staffing on the delivery of health services in Wajir County using a mixed methods approach. The quantitative method made it possible to quantify the effect.
Gimoi (2017)	Implications of devolution for healthcare system in Nairobi County.	Devolution had not addressed the challenge of shortage of health workers in these facilities and hence, the available personnel were strained. Most of the staff in the county also remained unmotivated as only a few public health facilities had incentives for staff motivation. All these contributed to poor health services delivery.	Methodology and population gaps-The study was undertaken in a different context and employed a single method (descriptive survey research design) in accomplishing the study objectives.	
Masaviru, Namusonge	Governance of human resources under devolution	Devolved human resource governance significantly	Population gap-Conducted in a different context from that of this	

and Nambuswa (2021)	and delivery of public health services in Trans Nzoia County	influenced health services delivery in this county	current study and hence, its findings could only be generalized in the current context with caution.	
Wanjohi (2019)	How devolution affected the availability of medicines in the Makueni County Referral Hospital	The health sector under devolution faced critical brain drain due to arising conditions at the county level and critical staff were overconcentrated in the facilities in higher levels leaving the other health facilities without critical personnel. The overworked health personnel in primary health facilities could not therefore offer efficient healthcare services.	Knowledge, methodology and population gaps- this study only provided an overview of the implications of devolved staffing issues on service delivery. The study used a single research design and was conducted in a different context.	
Muwonge et al. (2022)	Devolution and delivery of healthcare services in Kenya	Counties had maintained and, in many cases, significantly expanded the levels of, and access to service delivery in healthcare. Nonetheless, despite the increased in the number of employed health personnel, staff shortages, absenteeism and demotivation persisted lowering quality of healthcare services delivered.	This study provided a general overview of implications of devolved health staffing on health service delivery in Kenyan county governments. Thus, it was difficult to single out the exiting scenario in Wajir County. The relationship between these variables was not determined using empirical data.	
Ntayia and Moi (2022)	Influence of healthcare human resource management in Kajiado County	Devolution had facilitated the recruitment of qualified healthcare personnel perhaps from local societies. However,	Knowledge and population gaps- conducted in a different context and did not quantify the effect of devolved	

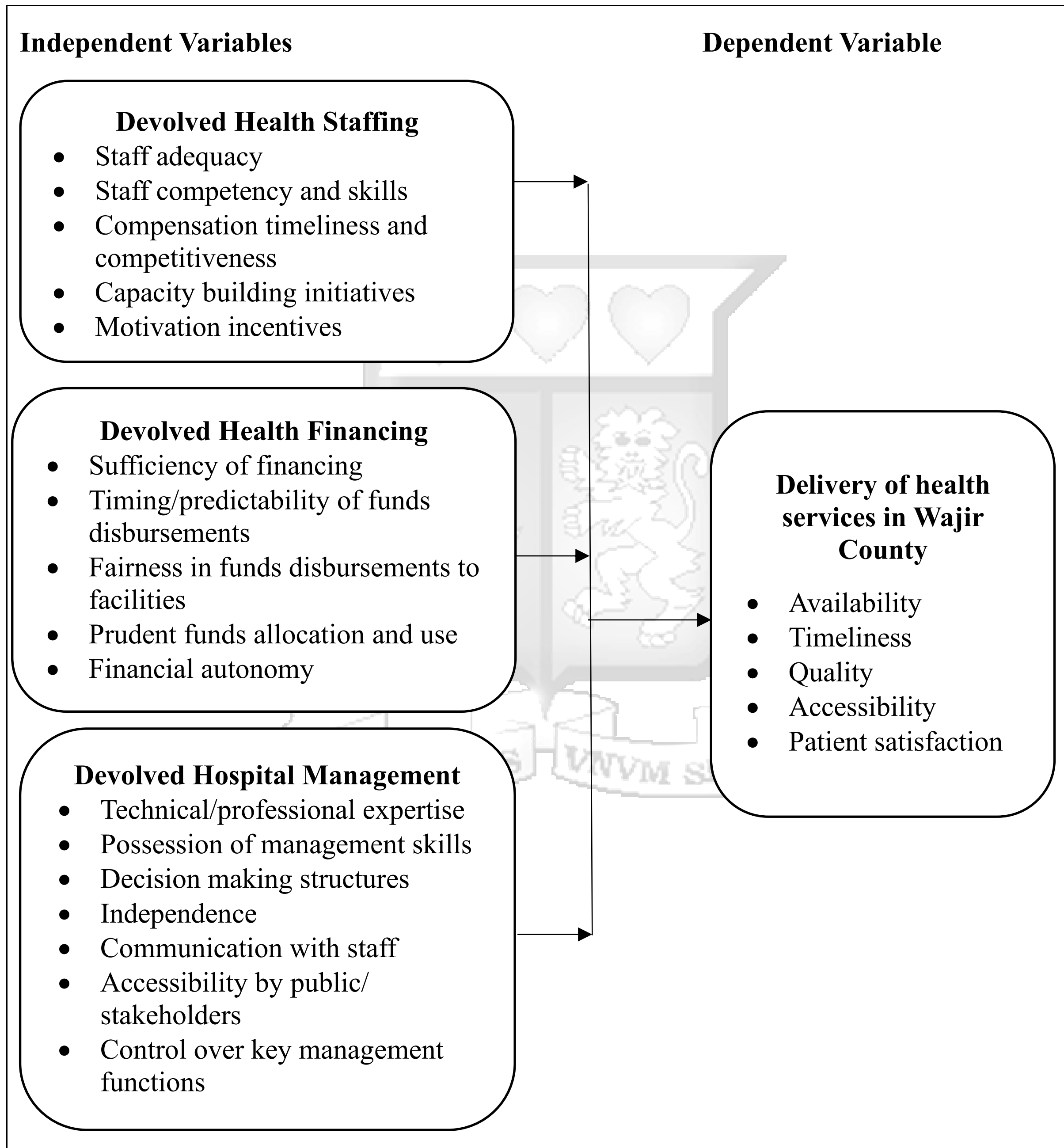
		issues such as lack of morale among staff hindered quality service delivery.	human resource management on health services delivery.	
Anampiu (2020)	Assessed factors which influenced healthcare services' delivery at the Sub-County hospitals in Meru County	Staffing factors namely training, compensation and motivation of healthcare staff positively and significantly affected the access to quality and efficient health services	Methodology and population gaps-The study as well used a single research method and context was different	
Wanzala and Oloo (2019)	Role of devolution in healthcare services delivery in Kenya	Challenges of funding namely inadequate funds, their delayed disbursement and their misappropriation were a major hindrance to efficient health services delivery in Kenya.	Methodology and population gaps. The study used a literature review approach and did not quantify the effect of devolved funding on health services delivery. It also generalized the condition in Kenya; thus, it was difficult to single out the conditions in Wajir County.	The study examined the effect of devolved health funding on the delivery of health services in Wajir County where a mixed methods research design was employed.
Rufo (2019)	Devolution and healthcare services provision in Tharaka Nithi County	After devolution, the financing of health services in this facility was not adequate. Moreover, the finances available to this facility were not disbursed on time and such delays negatively impacted normal hospital operations resulting to delayed service delivery	Methodology and population gaps - The study used a single research method and was undertaken in a different context. Hence, generalizing its findings in the context of Wajir County could only be done with caution.	
Njiru, Tenambergen and Oluoch (2018)	Devolution and healthcare provision in Meru County	Devolved healthcare financing operationalized in terms of adequacy of funds and timely	Methodology and population gaps - The study used a single research method and was undertaken in a different context. Therefore,	

		disbursement had substantially boosted health services delivery	generalizing its findings in the context of Wajir County could only be done with caution.	
Indiazi (2021)	Implications of devolved healthcare financing on health services delivery in public health facilities in Western Counties	Devolved healthcare financing substantially improved health services delivery	Methodology and population gaps - The study used a single research method and was undertaken in a different context. Therefore, generalizing its findings in the context of Wajir County could only be done with caution.	
Kimathi (2017)	Challenges facing Kenya's devolved healthcare sector	There were inconsistencies in funds allocations to healthcare facilities in counties which stalled critical functions further creating inefficiencies in health services delivery	Knowledge, methodology and population gaps-The study did not quantify the effect of devolved health funding on health services delivery using empirical data. Also, the study used a single research method and provided a generalized view of delivery of health services in Kenyan county governments. Thus, the situation in Wajir County could not be determined.	
Mbuthia et al. (2019)	Health purchasing at the county level in Kenya	Devolved health financing limited the financial autonomy of healthcare facilities resulting to perverse incentives which hindered quality service delivery.	The study was qualitative in nature and did not actually quantify the effect that devolved health financing had on health services delivery. The study also focused on Kenya in general.	
Kairu et al. (2021)	Investigated health facility financing in Kenya in the devolution context	Devolution led to constrained financial autonomy of public health facilities and this adversely affected the delivery of services	The study was undertaken in a different context and only focused on facility financial autonomy as part of devolved health financing. Effect on service delivery was not quantified as well.	The study sought to establish the effect of devolved hospital leadership/manage ment on the delivery

		through delayed procurement of medical supplies, for instance.		of health services in Wajir County. A mixed methods research design was used.
Muchomba (2015)	How devolved governance impacted the general performance of Kenya's health sector-Nairobi and Mombasa Counties.	Devolved organizational leadership substantially influenced patients' satisfaction levels and quality of services provided.	Methodology and population gaps-the study used a single research method and was in a different context.	
Baraza et al. (2017)	Recentralization within decentralization in Kenya's healthcare system focusing particularly on county hospital autonomy under devolution	Devolution had led to reduced hospital autonomy which weakened hospital leadership and management structures and this adversely affected the quality of health services provided.	The effect of devolved hospital leadership and management on health services delivery was not quantified. The study was also undertaken in a different context.	
Njoroge and Moi (2020)	Implications of devolution for healthcare administration in Gatanga Subcounty, Murang'a County	The study determined that devolution improved the management of health facilities in the subcounty resulting to improved service delivery.	The study was purely quantitative, using a survey research design and was undertaken in a different context. Generalizing its findings in the context of Wajir County could thus only be done with caution.	
Njiru, Tenambergen and Oluoch (2018)	Devolved healthcare system's impact on the health services' delivery in Meru County	Sound devolved hospital leadership resulted to improved health services delivery	The study also used a single research method (descriptive survey method) and was undertaken in a different context.	
Andrew (2020)	Devolution and performance of health care systems in Kiambu County	Devolved leadership at county level positively and significantly affected performance of these systems as measured by efficiency in service delivery	The study used a single research method (descriptive survey method) as well and was conducted in a different context.	

2.5 Conceptual Framework of the Study

Figure 2.1 is the study' conceptual framework which showed the hypothesized relationship between devolved governance and the delivery of health services in Wajir County. The independent variables were devolved health staffing, devolved health financing and devolved hospital leadership while the delivery of health services was the dependent variable.



Source: Researcher (2024)

Figure 2.1: Conceptual Framework of the Study

2.5.1 Operationalization of Study Variables

Table 2.1 gives a summary of how the study variables were operationalized.

Table 2.2: Operationalization of Variables

Variable	Construct	Operational Definition	Measurement	Supporting Literature
Dependent Variable	Delivery of health services	Offering or availing timely, quality, accessible and satisfactory services which better the health wellbeing of persons who seek these services.	Five-point Likert scale	Mosadeghrad (2014), Handayani et al. (2015) Donabedian (2016)
Independent Variables	Devolved health staffing	Transfer of authority to carry out various health staffing functions such as the recruitment and firing of staff and defining the compensation packages from the national government to the relevant county government unit	Five-point Likert scale	Gimoi (2017), Anampiu (2020), Masaba et al. (2020), Masaviru, Namusonge and Nambuswa (2021), Muwonge et al. (2022), Ntayia and Moi (2022)
	Devolved health financing	Transferring powers for planning, managing and making decisions around financial resources for health from the national government to the county government	Five-point Likert scale	Kimathi (2017), Njiru, Tenambergen and Oluoch (2018), Mbuthia et al. (2019), Rufo (2019), Wanzala and Oloo (2019), Indiazi (2021) Kairu et al. (2021)
	Devolved hospital leadership/ management	Transfer of authority to carry out core functions of healthcare administration/leadership /management such as human resource management from the national government to independent units at the county level	Five-point Likert scale	Muchomba (2015), Baraza et al. (2017), Kimathi (2017), Njiru, Tenambergen and Oluoch (2018), Njoroge and Moi (2020), Andrew (2020)

2.6 Chapter Summary

This chapter provided a literature review on the concept of devolved governance and delivery of health services. The theories underpinning the study were discussed and their relevance explained. Various available empirical studies carried out to show the link between devolved health staffing, devolved health financing and devolved hospital management and delivery of health services were also provided in this chapter. The research gaps singled out in these studies were summarized as well. The chapter further provided the conceptual framework for the study and a summary of how the operationalization of variables was undertaken.

CHAPTER THREE: RESEARCH METHODOLOGY

3.1 Introduction

This chapter provides a general outline of the preferred research methodology. It covers key elements ranging from the research philosophy and design to the methods for data analysis and presentation of findings.

3.2 Research Philosophy

This study was founded on the pragmatic paradigm which emerged following arguments that assessing the 'truth' regarding the real world could not possibly be achieved solely by using one scientific approach as supported by the positivist paradigm nor was it feasible to ascertain social reality as envisioned under the interpretivist paradigm (Kaushik & Walsh, 2019). The philosophers supporting this paradigm among them Brierley (2017) argued that research anchored on a single paradigm was not sufficient enough, instead, all that was required was a perspective which would offer study approaches considered suitable for examining a particular phenomenon. Consequently, a position which offered the most hands-on, suitable and pluralistic research methods for examining a given phenomenon was therefore, required (Brierley, 2017). This birthed a paradigm which applied mixed methods approach as a pragmatic way of comprehending the actual behaviours of participants, the beliefs on which such behaviours are anchored and the implications of their diverse behaviours (Borges & Revez, 2019).

VT OMNES VNVM SINT

3.3 Research Design

The study adopted a convergent parallel research design which is part and parcel of the mixed methods research approach. The adoption of this design was informed by the fact that qualitative as well as quantitative methods were employed. These two methods were equally prioritized, however, when it came to the analysis of data collected, they were kept separately as suggested by Dawadi, Shrestha and Giri (2021) among other researchers. During the overall interpretation phase, the results emerging from the two approaches were merged. Using this research design boosted the validity of findings as it was possible to maximize the strengths of each method while minimizing their weaknesses as argued by Panya and Nyarwath (2022). According to Carter (2020) and Rassel et al. (2020), the convergent parallel design also enabled the exhaustive analysis of the research problem through the converging or merging quantitative and qualitative data. The quantitative approach entailed a survey where a questionnaire was

administered to health facility managers while in the qualitative approach, selected key county health officials were interviewed.

3.4 Study Locale

The study was conducted in Wajir County, an ASAL county situated in the North-Eastern Region of Kenya. The county had eight sub-counties namely, Wajir South, Wajir East, Wajir West, Tarbaj, Wajir North, Buna, Habaswein and Eldas. The county had a total of 164 health facilities of which 126 were owned by Ministry of Health, 36 facilities owned by private people while the remaining 2 facilities were owned by faith-based organizations. Of the 126 MoH facilities, 87 were level 2, 28 level 3, and 11 level 4. Public Health facilities were run by the county government ministry of health with funding support from international partners and UN agencies.

Table 3.1: Health Facilities in Wajir County

Facility Ownership	**Category**	**No.**
Ministry of Health	Level 2	87
	Level 3	28
	Level 4	11
	Total	**126**
Private Investors		36
Faith Based Organizations		2
Total		**164**

3.5 Target Population

Target population can be described as the whole group of people or items to which findings can be generalized (Snyder, 2019). This study targeted 33 county health management team members and 126 public health facility managers spread across the county. These two categories were considered in this study as they were the heart of public health services delivery at the county government level.

3.6 Sample Size and Sampling Techniques

Given that the number of public health facility managers targeted was relatively small, a census method was employed where all the 126 public health facility managers took part in this study.

In selecting the county health management team members, purposive sampling technique was however used. The county health management team members were purposively sampled as by the virtue of their positions, they would provide in-depth information on the condition of public health services delivery in different regions across Wajir County following transition to devolution. Their views were deemed crucial in complementing the information provided by the public health facility managers. Their selection was informed by the researcher's subjective opinion regarding their role in health governance and service delivery and the particular information they possessed with regards to the study objectives.

Table 3.2: Sample Size and Sampling Technique

Category	Target Population	Sampling Method	Sample
County Health Management Team Members	33	Purposive	5
Public Health Facility Managers	126	Census	126

3.7 Data Collection

3.7.1 Data Type and Source

The research used primary data which was gathered first hand from the county health management team members and public health facility managers.

3.7.2 Research Tools

Qualitative data was gathered through the use of interview guides which were administered to the county health management team members while a semi-structured questionnaire used to collect quantitative data from the public health facility managers. The research instruments contained questions focusing on the specific research objectives and the profile of the respondents. A questionnaire was preferred in this case because it offered greater anonymity; thus, it was likely to yield accurate information and also the fact that it could be administered to a larger number of people at a lesser cost and time consumed. Interview guides on the other hand were useful in gathering in depth information due to the unstructured nature of the questions asked.

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3.7.3 Data Collection Procedures

To administer the questionnaire, the drop and pick later approach and also online platform where possible were used. A face-to-face approach was adopted in conducting the interviews. The data was gathered by two skilled research assistants. The interviews were conducted in English. Each interview session lasted between 30 to 40 minutes and were audio-recorded.

3.8 Pilot Testing

The data collection instruments namely interview guide and survey questionnaire were subjected to a pilot testing before being used to collect data. The pilot test was aimed at refining the instruments to ensure they were clear to respondents when answering the questions, and that data was obtained without any hitch. A pilot test also provided a rough assessment of the validity and relevance of the questions which assisted in predicting whether the data collected was likely to be reliable. The pilot study covered 10 percent of the determined sample size, but this was not included in the sample. To ensure credibility of the findings, several measures including data triangulation, record keeping, use of verbatim and reducing personal bias were also put in place.

3.8.1 Validity of the Tools

According to Bhat (2019), if a research tool measures what it is meant to measure, then its validity is assured. Face and content validity were tested as a way of testing and enhancing the validity of the data collection instruments. The project supervisor generally appraised the appropriateness of the instruments and the changes they recommended incorporated in improving their quality and validity. For enhanced qualitative validity, all the procedures applied in the process of conducting the interviews were carefully documented, discrepant information provided was captured and triangulation was considered.

3.8.2 Reliability of the Tools

According to Mohamad et al. (2015), a research instrument is measured on its ability to be reliable. Cronbach (1951) defines reliability as the consistency of a set of items for measurement. It refers to how consistent a measurement is, or the extent a tool used under the same condition with the same subjects will measure the same way in each one of the times it is used. A measure's reliability was tested by observing the result it returned from measuring the same object/subject twice and the result was similar. Cronbach alpha coefficients were used as measures of reliability for the questionnaire where coefficients greater or equal to 0.7 were

considered good/acceptable. As shown in Table 3.3, the Cronbach alpha coefficients for all the variables were greater than 0.7 an indication that the different constructs in the questionnaire were reliable and therefore, the questionnaire could be used in the main study. Qualitative reliability was ensured through the documentation of all interview procedures, triangulation and comparing the findings obtained with those reported in other studies.

Table 3.3: Reliability Test Results

Variable	No of Items	Participants	Cronbach Alpha	Remark
Devolved health staffing	7	13	0.757	Reliable
Devolved health financing	6	13	0.749	Reliable
Devolved hospital leadership/management	6	13	0.876	Reliable
Delivery of health services	6	13	0.787	Reliable

3.9 Data Analysis

Qualitative analysis involved content analysis where the data gathered from the interviews wasbe recorded, transcribed, coded and grouped into themes according to the research questions. Quantitative data analysis involved descriptive analysis and inferential analysis and SPSS a computer software program, was used in analyzing statistical data was used in this process. Descriptive statistics were computed in order to give simple summaries about the sample and measures. Inferential analysis was divided in to correlation analysis and regression analysis. Pearson's correlation analysis was employed in ascertaining the nature and significance of the association between the devolved health staffing, devolved health financing and devolved hospital leadership and healthcare services delivery in Wajir County. Multiple regression analysis was used to determine the actual effect of each of the independent variables on delivery of healthcare services. The following equation was the multiple linear regression model used in showing relationship between the study variables.

$$\mathbf{Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + e}$$

Where:

Y = Delivery of health services in Wajir County.

β_0 = Constant Term,

$\beta_1, \beta_2, \beta_3$ = Beta coefficients

X_1 = Devolved health staffing

X_2 = Devolved health financing

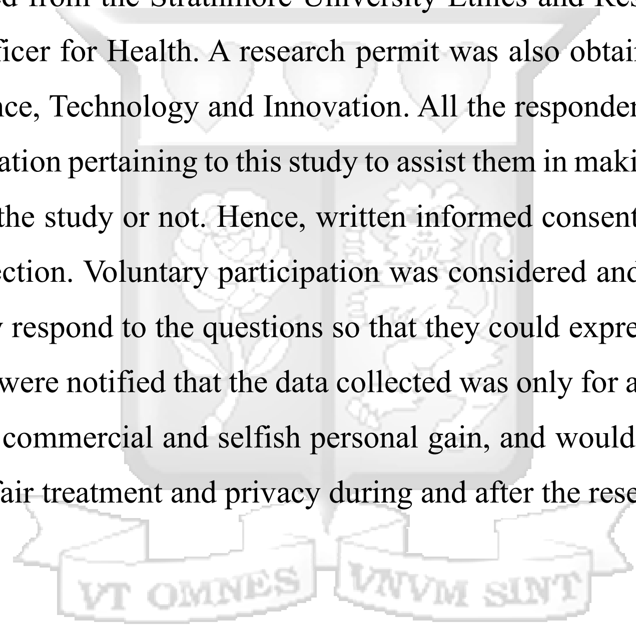
X_3 = Devolved hospital leadership/management

ε = Error term

The quantitative findings from this study were presented using charts and tables while for qualitative findings, proper verbatim quotes and narratives were considered.

3.9 Ethical Considerations

Several ethical issues were considered in this research. Before starting the study, ethical clearance was obtained from the Strathmore University Ethics and Research Committee and County Executive Officer for Health. A research permit was also obtained from the National Commission for Science, Technology and Innovation. All the respondents were supplied with all the relevant information pertaining to this study to assist them in making an informed choice whether to be part of the study or not. Hence, written informed consent was requested before starting any data collection. Voluntary participation was considered and the participants were asked to anonymously respond to the questions so that they could express their views without fear. The respondents were notified that the data collected was only for academic purposes and never for exploitative commercial and selfish personal gain, and would not harm them in any way. Full disclosure, fair treatment and privacy during and after the research were prioritized.



CHAPTER FOUR: DATA ANALYSIS, FINDINGS AND INTERPRETATIONS

4.1 Introduction

This chapter contains the study findings and their interpretations. In this study, content, descriptive and inferential analyses were carried out. The organization of the chapter was largely informed by the specific objectives of the study.

4.2 Response Rate

One of the renown indicators of the quality of a research study is the successful response rate (Wu, Zhao & Fils-Aime, 2022). A total of 126 questionnaires were administered to public health facility managers in Wajir County. Out of this number, 103 were adequately filled and returned resulting to a successful response rate of 81.7%. Three out of the five planned interviews with the county health management team members were also successful translating to a 60.0% response rate for the interviews. These response rates were highly desirable for data analysis and reporting consistent with argument by Fosnacht et al. (2017) that, higher response rates improved data quality and also reduced results biasness in research studies. Table 4.1 contains the response rate results.

Table 4.1: Successful Response Rate

Research Instrument	Respondent Category	Category	Frequency	Percentage
Questionnaire	Public health facility managers	Returned/adequately filled	103	81.7
		Unreturned/not filled	23	18.3
		Total	**126**	**100.0**
Interview guide	County health management team members	Successful	3	60.0
		Unsuccessful	2	40.0
		Total	**5**	**100.0**

4.3 Demographic Characteristics of the Respondents

This section contains information on the demographic characteristics of the public health facility managers and the county health management team members. This information was

deemed crucial in giving the study responses a context. Some of the characteristics explored included the respondents' gender, age, their academic qualifications and also the duration of serving in their positions. Table 4.2 contains findings on the basic information of the facility managers.

Table 4.2: Demographic Characteristics of Public Health Facility Managers

Demographic Characteristics	Category	Frequency	Percent
Gender	Male	83	80.6
	Female	20	19.4
	Total	**103**	**100.0**
Age	30 years and below	18	17.5
	31-40 years	72	69.9
	41-50 years	10	9.7
	Above 50 years	3	2.9
	Total	**103**	**100.0**
Academic qualifications	Diploma certificate	79	76.7
	Higher national diploma (HND)	2	1.9
	Bachelors' degree	22	21.4
	Total	**103**	**100.0**
Duration of working in the health sector	4 years or less	14	13.6
	5-9 years	69	67.0
	10-14 years	11	10.7
	15 years and above	9	8.7
	Total	**103**	**100.0**
Duration of serving as health facility manager	Less than 3 years	17	16.5
	3-6 years	59	57.3
	Above 6 years	27	26.2
	Total	**103**	**100.0**
Profession/area of expertise	Midwife	2	1.9
	Nurse	92	89.3
	Clinical Officer	6	5.8
	Community Health Assistance	3	2.9
	Total	**103**	**100.0**
Ranking of healthcare facility	Level 2 - Health Dispensaries	71	68.9
	Level 3 - Health Centres	28	27.2
	Level 4 - County Hospitals	4	3.9
	Total	**103**	**100.0**

The study established that majority of the public health facility managers (80.6%) were male an indication of male dominance in the management of public health facilities in Wajir County. The study results also revealed that majority of these managers (69.9%) were in the age bracket of 31 to 40 years. Pertaining to their academic qualifications, the majority of the public health facility managers (76.7%) had a diploma certificate. These results generally suggested that public health facility managers in Wajir County possessed basic competencies needed in handling their day-to-day tasks in their areas of work. It was also found that the majority of the public health facility managers (67.0%) had been working in the health sector for a duration of 5 to 9 years. Moreover, more than half of these managers (57.3%) had served in their current positions for 3 to 6 years. Based on the results on the duration the managers had worked in the health sector and also served in their current positions, it can be argued that the greater percentage of public health facility managers in Wajir County had accumulated sufficient experience and understanding of health issues in public health facilities within the county. For that reason, they were well positioned to provide articulate responses on the study's subject matter. The study findings further demonstrated that majority of the managers (89.3%) were nurses and that the greater number (68.9%) were drawn from Level 2 health facilities commonly referred to as health dispensaries. Further analysis revealed that the interviewed county health management team members (KI1, KI2 and KI3) had worked for the County Government of Wajir for 11 years, 12 years and 7 years respectively and served in different capacities within the county's health sector.

4.4 Devolved Health Staffing

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The study sought to determine the effect of devolved health staffing on delivery of health services in Wajir County. Prior to determining the relationship between these variables, devolved health staffing was explored by carrying out content and descriptive analysis.

4.4.1 Aspects of Devolved Health Staffing in Wajir County

The public health facility managers were asked to react to various items in the devolved health staffing construct anchored on the different indicators adopted in measuring the variable. These managers indicated the extent the outlined items described the staffing condition in their health facilities after the health function was devolved based on a five-point Likert scale. In interpreting the results, the means and standard deviations for each item and also the overall construct were considered. The following criteria was adopted when interpreting the mean values across all constructs in the study: a mean of 1.000-1.499 denoted Not at All, 1.500-2.499

meant Small Extent, 2.500-3.499 signified Moderate Extent, 3.500-4.499 represented Great Extent while 4.500-5.000 indicated Very Great Extent. Table 4.3 contains the descriptive statistics on devolved health financing in Wajir County based on the responses of the facility managers.

Table 4.3: Descriptive Statistics on Devolved Health Staffing

Statement	Not at All	Small Extent	Moderate Extent	Great Extent	Very Great Extent	Mean	SD
All the staff in this facility were recruited on merit basis and have the recommended competencies, skills and experience required in critical areas.	3.90%	15.50%	15.50%	35.00%	30.10%	3.718	1.167
Health personnel in this health facility are usually accorded opportunities for regular and relevant training and development to boost their capacity.	8.70%	35.90%	34.00%	19.40%	1.90%	2.699	0.948
There has been recruitment of more health staff in this health facility since devolution of health function.	23.30%	49.50%	15.50%	7.80%	3.90%	2.194	1.010
The compensation packages for employees in all cadres in this facility are competitive enough to enhance their morale.	30.10%	39.80%	20.40%	3.90%	5.80%	2.155	1.082
Staff compensation in this health facility is usually prompt and timely.	45.60%	25.20%	8.70%	15.50%	4.90%	2.087	1.269
There are in place diverse incentives for motivating and enhancing performance of staff in all critical areas and cadres in this health facility.	43.70%	43.70%	8.70%	3.90%	0.00%	1.728	0.782
The number of personnel employed in this facility is optimal across all critical areas and cadres.	58.30%	20.40%	18.40%	1.00%	1.90%	1.680	0.942
Composite Mean and Standard Deviation						**2.323**	**0.594**
Valid N=103							

The study results outlined in Table 4.3 suggested that on average, the public health facility managers indicated that, ensuring that all the staff in public health facilities were recruited on merit basis and had the recommended competencies, skills and experience required in critical areas was the most prioritized aspect of devolved health staffing in Wajir County. This finding was supported by the computed mean value of 3.718 and a standard deviation of 1.167. The observations of the public health facility managers were consistent with the assertions of the interviewed county health management team members (KI1, KI2 and KI3) who unanimously reported that healthcare staff in Wajir County had the necessary competencies which needed to be improved and maintained continuously through regular capacity building programmes.

According to the public health facility managers, giving health personnel opportunities for regular and relevant training and development to boost their capacity was on average, undertaken to a moderate extent as illustrated by the mean value of 2.699. This finding mirrored the sentiments of one of the county health management team members (KI1) who argued that capacity building initiatives targeting health personnel in the said facilities in the county had declined since 2017. The official decried that,

> *"In the first 5 years of devolution, the county government was committed to supporting staff professional development by sponsoring them for specialized trainings/courses. Healthcare partners also provided refresher trainings; however, this trend has changed since 2017."* ... KI1

The other two county health management team members (KI2 and KI3) however, observed that the County Government of Wajir had carried out significant capacity building for health personnel working in the public health facilities within the county as attested by the large number of healthcare workers sponsored to undertake specialized trainings in different fields. In supporting their argument, KI2 noted that,

> *"Since devolution took effect, vast short term and specialized trainings were initiated in the department. Wajir County Referral Hospital was earmarked as a training institution. A total of 18 medical officers had received specialized training in different medical fields and were providing varied services ranging from surgeries, obstetrics, oncology, ophthalmic, psychiatrics, and radiology among others. Moreover, nearly 105 clinical officers, laboratory technicians and nurses had also acquired diverse HNDs in ENT, nephrology, pediatrics, psychiatry, hematology, oncology, intensive care, preoperative care, and ophthalmology among others."* KI2

On average, based on the views of the public health facility managers, other aspects of devolved health staffing such as the recruitment of more health workers in public health facilities, making compensation packages for staff in all cadres competitive enough to enhance their morale and always ensuring their prompt and timely compensation had been achieved to a small extent.

This observation was backed up by the computed mean values of 2.194, 2.155 and 2.087 respectively. The responses of the public health facility managers to some extent contradicted the views of the interviewed county health management team members who stated that staff salaries or compensation were duly paid on time and that salary scales were determined by the Salaries and Renumeration Commission which ensured uniformity for all staff.

Regarding existence of motivation incentives for staff, KI1 decried that no funding was set aside for such incentives and that promotions were not well managed. According to this official, there were no specific timelines for promotions and when done, they were not systematic and based on merit. The official added that ideally, promotions were to occur after 3 years, however, in this county staff had to wait for up to 8 years before they were promoted. This observation by KI1 was inconsistent with the argument by K13 that many staff in public health facilities in Wajir County had been promoted based on their experience and years of service. KI3 also reported that staff in this county received salary increments every January while KI2 asserted that the Wajir County Referral Hospital recognized and rewarded best performing staff each year as a way of motivating its staff.

Employing adequate or optimal personnel across all critical areas and cadres in public health facilities was the least prioritized practice under devolved health staffing as indicated by the public health facility managers. This inference was affirmed by the computed mean value of 1.680. In line with the views of the said managers, the county health management team members unanimously noted that while the number of staff in public health facilities had remarkably increased after devolution, they were not adequate to serve the needs of the increasing population in Wajir County. One of these county health management team members explained that,

> *"The county government has achieved significant milestones in addressing the human resource gaps in the health function from barely over 200 technical and support staff at inception of devolution to slightly more than 1000 staff currently spread across different carders. Approximately 30% of these staff are based in Wajir County Referral Hospital. The nurse to population ratio is 1:1950 while the doctor to patient ratio is 1:11631."*
> KI2

KI1 emphasized the need for the county government to prioritize the recruitment and deployment of additional staff to reinforce the existing capacity and operationalize the newly established health facilities. Overall, from the composite mean of 2.323 and standard deviation of 0.594 for the devolved health staffing construct as shown in Table 4.3, it can be argued that the public health facility managers indicated that the items presented on devolved health

staffing in Wajir County only to a small extent, described the staffing condition in public health facilities since the devolution of the health function. Therefore, efforts and measures to improve various of aspects of health staffing in the county such as the recruitment of adequate health personnel, their training and development and offering competitive staff compensation packages were inevitable if devolution objectives were to be accomplished.

4.4.2 Perceived Effect of Devolved Health Staffing on Delivery of Health Services

The views of the public health facility managers pertaining to how devolved health staffing had affected delivery of health services in Wajir County were also sought. From the responses given, there was divergence in opinions regarding the implications of devolved health staffing on the delivery of health services in this county as shown in Figure 4.1.

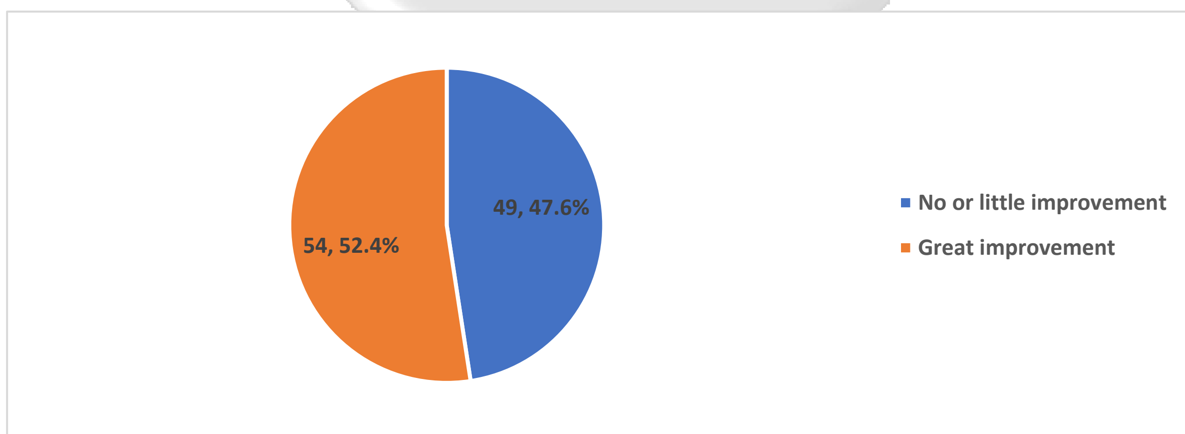

Figure 4.1: Perceived Link between Devolved Health Staffing and Delivery of Health Services

The results displayed in Figure 4.1 showed that while slightly more than half of the public health facility managers (52.4%) argued that devolved health staffing had contributed to great improvement in the delivery of health services in Wajir County, 47.6% of them were of the view that it had led to no or little improvements. The main reason given in support of great improvements in delivery of health services in this county was the recruitment of more human resources to deliver health services to the local communities after the health function was devolved. With increased health staffing levels, reduced work load per staff was reported resulting to improved productivity and efficiency in service delivery. Timely delivery of services seen in reduced waiting times and availability of services at all times due to staff availability was also reported. Moreover, devolved health staffing was said to have led to the recruitment of local health personnel who were well received by the local communities resulting to increased utilization of health services in public health facilities in the county.

The public health facility managers who reported no or little improvements in the delivery of health services in Wajir County as result of devolved health staffing decried of inadequate staffing as some cadres of staff were yet to be employed. This concern was attributed to among others, low budgetary allocations and slow recruitment process undertaken once every 5 years. From the responses given, many of the healthcare facilities were managed by one staff who could not provide all the care needed. Several managers argued that, due to severe understaffing, the workload per staff was huge and as result, many were overwhelmed and could not effectively and efficiently deliver health services around the clock. Besides, healthcare personnel were denied annual leave at times. Other concerns raised by these managers in regards to devolved health staffing pertained to reduced trainings and lack of incentives to boost the morale of staff due to low budgetary allocations and heightened corruption and nepotism in the recruitment and deployment of healthcare staff. It was argued by one of the managers that minority groups did not get fair share during staff recruitment. Also, several staff opted to work near home facilities thus causing severe understaffing more so in rural facilities. All the above concerns were said to have culminated in to poor and inaccessible health services in the county.

From the interviews conducted, all the county health management team members reported that devolved health staffing had resulted to improved delivery of health services in Wajir County. KI1 asserted that increased staffing levels as result of devolution had improved access to and quality of care provided in public health facilities in the county. On the other hand, while acknowledging the enhanced number of healthcare workforce available for service delivery as a result of devolution, KI2 argued that political interference in human resource management was a major impediment to the prudent utilization of human resources. The official also noted that the turnaround time in public health facilities had greatly reduced in line with the service charters provided. KI3 linked devolved health staffing to improved patient satisfaction with services provided and availability of specialized health services due to the employment of more medical specialists.

4.5 Devolved Health Financing

The study also sought to examine the effect of devolved health financing on delivery of health services in Wajir County. The general outlook of devolved health financing in the county was first provided based on the feedback provided by the public health facility managers and county health management team members.

4.5.1 Aspects of Devolved Health Financing in Wajir County

The results presented in Table 4.4 captured the views of the public health facility managers on devolved health financing in Wajir County. Based on a five-point Likert scale, the managers rated the extent various statements or items reflected the financing of operations in their respective public health facilities following transition to devolution. The mean of responses for the various items and the construct in general were in this case computed and interpreted.

Table 4.4: Descriptive Statistics on Devolved Health Financing

Statement	Not at All	Small Extent	Moderate Extent	Great Extent	Very Great Extent	Mean	SD
There is always accountability in the way funds allocated to this health facility by the county government are spend.	12.60%	19.40%	25.20%	26.20%	16.50%	3.146	1.271
This health facility has some level of autonomy in the use of funds allocated to it by the county government.	22.30%	25.20%	11.70%	31.10%	9.70%	2.806	1.351
The funding received by this health facility from the county government matches the amounts allocated to similar facilities in the county.	33.00%	21.40%	14.60%	15.50%	15.50%	2.592	1.472
There are in place efficient mechanisms for ensuring prudent and efficient allocation of funds channelled to this health facility.	42.70%	33.00%	11.70%	8.70%	3.90%	1.981	1.120
The funding flows to this health facility from the county government are always sufficient enough to finance the hospital budget.	58.30%	31.10%	9.70%	1.00%	0.00%	1.534	0.711
The funds allocated to this health facility by the county government are always predictable and disbursed on time.	72.80%	23.30%	3.90%	0.00%	0.00%	1.311	0.543
Composite Mean and Standard Deviation						**2.228**	**0.753**
Valid N=103							

From the responses of the public health facility managers presented in Table 4.4, it was evident that on average, different aspects of devolved health financing in Wajir County had been realized to varying extents. For instance, while ensuring accountability in the utilization of funds allocated to public health facilities by the county government and granting these facilities some level of autonomy in the usage of the funds were undertaken to a moderate extent as revealed by the mean values of 3.146 and 2.806 respectively, ensuring that funding flows from the county government to these facilities were always sufficient enough to finance the hospital budgets was only realized to a small extent as supported by the mean value of 1.534. The findings also showed that, on average, the funds allocated to public health facilities by the county government were not at all always predictable and disbursed on time as depicted by the mean value of 1.311.

The views of the public health facility managers regarding the sufficiency of funding to public health facilities were to a large extent supported by the county health management team members who while noting a gradual increase in health financing from less than one billion in 2014 to over 3 billion in 2024, observed that the funds were not adequate enough to meet hospital's budgeted needs. The county health management team members also unanimously reported delays in the disbursement of funds to the said facilities by the county government. The remarks of KI2 and KI3 were recorded as follows: -

> *"Delays in funds disbursement are still evident and are majorly as result of untimely release of funds from the national government." KI3 …. "Disbursement of funds depends on the political good will of the executive and does not follow specific schedules." …. KI2*

Regarding fairness in funds allocation/disbursements to facilities, two of the county health management team members (KI2 and KI3) underscored that funding allocations were majorly based on the amount of work and activities undertaken as well as the set health care priorities especially in program-based budgeting. Pertaining to the financial autonomy of public health facilities, KI1 noted that with DANIDA funding, these facilities had autonomy in utilizing the funds. KI2 argued that financial autonomy depended on the political will in the county government while KI3 stated that health facilities had limited financial autonomy in the usage of funds allocated to them.

Further analysis showed that all the interviewed county health management team members underlined that, there were established structures for ensuring prudent funds allocation and utilization by public health facilities. KI2 and KI3 observed that quarterly expenditure review

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reports were usually produced, and various departments audited in a bid to track the usage of resources. The views of the county health management team members appeared to contradict the feedback provided by the public health facility managers who maintained that existence of efficient mechanisms for ensuring prudent and efficient allocation of funds channeled to health facilities was realized to a small extent.

Generally, the composite mean value of 2.228 given in Table 4.4 and the various responses given by the county health management team members implied that improvements in different indicators of devolved health financing such as the amount, predictability and timeliness of funding flows channeled or disbursed to public health facilities in Wajir County as desired was without doubt, necessary.

4.5.2 Perceived Effect of Devolved Health Financing on Delivery of Health Services

The results presented in Figure 4.2 showed the perceived effect of devolved health financing on the delivery of health services in Wajir County based on the responses of the public health facility managers.

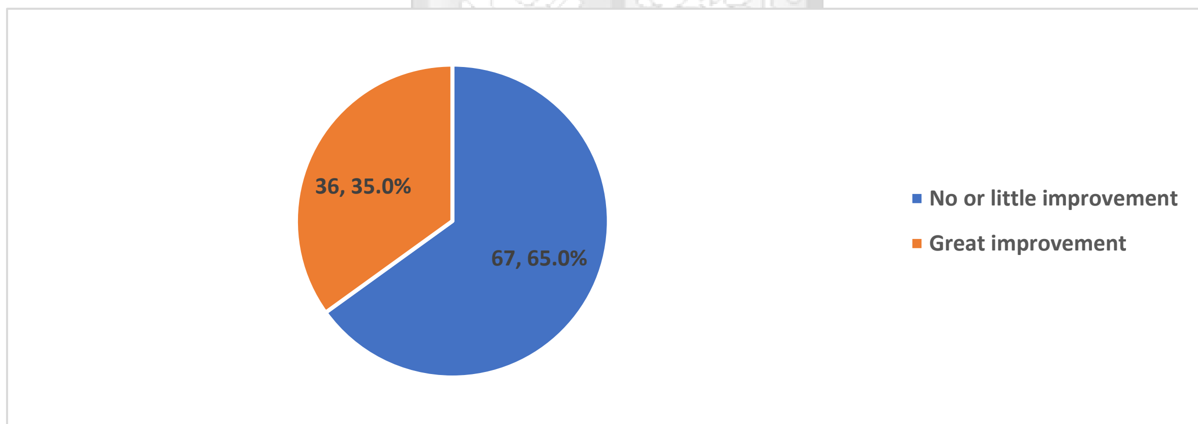

Figure 4.2: Perceived Link between Devolved Health Financing and Delivery of Health Services

As shown in Figure 4.2, the largest number of public facility managers (65.0%) argued that devolved health financing had led to no or little improvement in the delivery of health services in Wajir County. The rest of the managers (35.0%) reported great improvements in the delivery of these services observing that, the funding provided by the county government had considerably enhanced the basic operations of facilities, supported the recruitment and compensation of healthcare personnel, support staff and causal workers besides enabling the procurement of crucial medical supplies and equipment.

The managers who decried of no or little improvements in the delivery of health services in Wajir County majorly cited inadequate and untimely/delayed funding by the county government which resulted to delayed staff compensation, lack of regular staff trainings and drug stock outs. It was reported that the funding provided by the county government did not match the funding needs of health facilities. Moreover, the accumulation of huge pending wages and other bills due to untimely and unpredictable disbursement of funds disrupted facility operations. It was also noted that in some cases, the funds allocated by the county government were used without any consultations. These highlighted funding challenges under devolution were said to result to poor delivery of health services in the county as delayed salaries and lack of regular training resulted to poor staff morale. Delayed and unpredictable funds also adversely affected the purchase of essential commodities/supplies such as drugs that were needed in the day to day running of health facility operations.

The responses given by the county health management team members largely supported the feedback of the public health facility managers as they demonstrated that, while devolved health financing had to some extent improved the delivery of health services in Wajir County, pressing challenges existed. The inadequacy of funds allocated and the limited financial autonomy that had public health facilities in using these funds were the major challenges cited by the county health management team members. In their clarification, KI1 argued that,

> *"Health funding is planned at county health quarters with limited engagement of sub-county and health facilities. Before devolution, there were funds from DANIDA that were performance based and channeled directly to health facility accounts for managing local operations, renovations and limited extension of infrastructure. These funds have significantly reduced or not available to health facilities."*

KI2 reiterated that the funds received by public health facilities from the county government were limited and based on the priorities set and approved by the finance department.

4.6 Devolved Hospital Leadership/Management

The third objective of the study entailed establishing the effect of devolved hospital leadership/management on delivery of health services in Wajir County. Before evaluating this effect, an overview of devolved hospital leadership/management in this county was provided.

4.6.1 Aspects of Devolved Hospital Leadership/Management in Wajir County

The public health facility managers indicated the extent various statements on the devolved hospital leadership/management construct described the leadership and management of their

respective health facilities following the transition to devolution based on a five-point Likert scale. The views of these managers are outlined in Table 4.5.

Table 4.5: Descriptive Statistics on Devolved Hospital Leadership/Management

Statement	Not at All	Small Extent	Moderate Extent	Great Extent	Very Great Extent	Mean	SD
The management and leadership of this health facility is always accessible to the public and other key stakeholders for easier collaboration.	1.90%	7.80%	20.40%	38.80%	31.10%	3.893	0.999
The management and leadership of this health facility always maintains open and transparent timely communication with staff as one of its values for enhanced efficiency.	4.90%	8.70%	19.40%	48.50%	18.40%	3.670	1.033
The management of this health facility usually makes timely decisions pertaining to any issue concerning the running of the facility operations and service delivery.	4.90%	14.60%	21.40%	46.60%	12.60%	3.476	1.046
The management of this health facility is steered by persons who possess crucial management skills.	2.90%	20.40%	26.20%	30.10%	20.40%	3.447	1.118
The management and leadership of this health facility is made up of persons with adequate relevant technical and professional expertise.	5.80%	16.50%	31.10%	33.00%	13.60%	3.320	1.087
The management and leadership of this health facility has most of the times been able to carry out its managerial roles without the influence from the county government leadership.	4.90%	26.20%	23.30%	35.00%	10.70%	3.204	1.097
Composite Mean and Standard Deviation						**3.502**	**0.835**
Valid N=103							

As shown in Table 4.5, the public health facility managers on average indicated that, the management and leadership of public health facilities in Wajir County were to a great extent always accessible to the public and other key stakeholders for easier collaboration and also, they always maintained open and transparent timely communication with staff as one of their values for enhanced efficiency. This finding was attributed to the obtained mean values of 3.893 and 3.670 respectively. The feedback of the county health management team members on these two parameters were however, to some extent mixed. KI2 observed that with transition to devolution, vertical and horizontal communication of staff in public health facilities had greatly improved. This was further enhanced by the extensive use of social media networks. On the contrary, KI3 argued that communication with staff was still a challenge due to the vastness of the county and the large number of staff. Regarding the accessibility of hospital management/leadership to the public and other stakeholders, the county health management team members reported improved two-way communication which made it possible to receive feedback and complaints from patients and the community. Nonetheless, KI2 observed that accessibility was influenced by the level of management while KI3 noted that no formal channels for engaging public existed in many facilities.

According to the public health facility managers, other aspects of devolved hospital leadership/management such as management/leadership's timely decision-making pertaining to any issues concerning the running of facility operations and service delivery were emphasized to a moderate extent. This observation was supported to some extent by the feedback of KI3 that some bureaucracies in decision making existed. Citing difficulties in the implementation of some decisions made by hospital management, KI1 stated that,

> *"Making decisions is easy, however, implementing them is difficult. Decisions made by the health facility staff have to be communicated to the sub-county health management team members who review and reach out to the county health management team with likely or unlikely approvals."* KI1

With regard to the technical and professional expertise of facility management/leadership teams, the county health management team members observed that the selected teams were largely qualified. According to KI3, the county government prioritized the selection of technical staff and managers for various managerial roles based on their expertise and professional skills. The assertions of KI3 were reinforced by the remarks of KI2 that,

> *"Before devolution, sub-counties were headed by either clinical or medical officers regardless of their leadership skills. Nowadays, this has changed. Positions are given to health professionals of any cadre provided they have the requisite skills." KI2*

The county health management team members held mixed positions regarding whether facility management/leadership teams in Wajir County possessed strategic management skills. While KI3 reported that such teams possessed the said skills largely as a result of the trainings received in their line of work, KI1 decried that many managers lacked the skill. The official explained that,

> *"The pre-devolution managers used to undergo senior management training routinely thereby improving management skills and capacities. This does not happen under devolution which may result to deficiency in management capacities in the long run." … KI1*

KI3 asserted that through capacity building and partnership with the Kenya School of Government (KSG), the county government had made great strides in equipping facility management/leadership teams with diverse management skills. On their part, KI2 noted that few members of health management teams had received strategic management skills training.

The findings outlined in Table 4.5 also demonstrated that the ability of the management and leadership of public health facilities in Wajir County to most of the times carry out their managerial roles without influence from the county government leadership was the least prioritized aspect of devolved hospital leadership/management according to the public health facility managers as illustrated by the mean value of 3.204. The thoughts of the public health facility managers were to some extent consistent with the views of the county health management team members. According to KI1, most decisions were consultative and the hospital management teams made recommendations to the county health management teams except when staff leaves and performance were concerned. The official noted that often, the county health management teams disregarded or ignored the recommendations by sub-county coordinators. KI2 reported that the hospital management teams were semi-autonomous in making some important decisions such as human resource management and the day to day running of the health facilities. However, they might not be independent in decisions involving finances and in other cases where county health management team members made some interventions. KI3 argued that though consultative meetings were fairly undertaken, county health officials greatly influenced decisions at the health facility level.

Overall, based on the feedback of the public health facility managers and county health management team members, it can be inferred that while devolved hospital leadership and management was somehow commendable in Wajir County, there were practices that needed to be improved or prioritized in order to realize various devolution objectives

4.6.2 Perceived Effect of Devolved Hospital Leadership/Management on Delivery of Health Services

The results presented in Figure 4.3 summarize the perceptions of public health facility managers regarding how devolved hospital management and leadership had affected the delivery of health services in Wajir County.

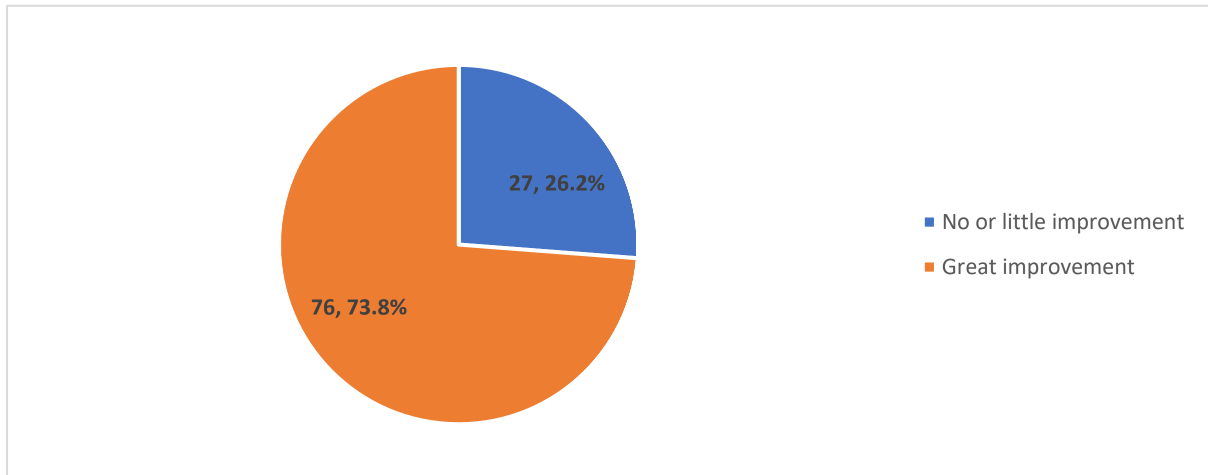

Figure 4.3: Perceived Link between Devolved Hospital Leadership/Management and Delivery of Health Services

It was established that majority of the public health facility managers (73.8%) asserted that devolved hospital management and leadership had resulted to great improvement in the delivery of health services in their respective facilities. The reported improvements pertained to the expanded scale, reduced cost and improved reliability, quality and accessibility of health services provided in public health facilities. The rest of the managers however noted no or little improvements in health services in these facilities. The managers reporting great improvements in the delivery of the said services linked devolved hospital management and leadership to timely decision making by management and their easy access and close working relationship with staff in different levels. The said managers underscored that they were able to meet with other staff one and one to discuss about pressing facility challenges and deliberate on the necessary solutions on time. For that reason, early detection of problems and prompt measures to address them had been made possible. Devolved hospital management and leadership had also improved communication and feedback systems in public health facilities, it enhanced transparency and accountability in the way these facilities were managed besides making it easier for management to supervise the utilization of available resources. Furthermore, devolved hospital management and leadership was linked to improved delivery of health

services by enhancing the ability of hospital managers to build rapport with the local communities, county leadership and other stakeholders. With the existence of such rapport, local communities, county leaders and other stakeholders were able to participate in facility management, planning and monitoring of service delivery. KI1 linked devolved hospital management to faster decision making which improved the delivery of health services.

The 26.2% of the public health facility managers that argued that there were no or little improvements in the delivery of health services as a result of devolved hospital management and leadership raised concerns of frequent interference and frustrations from the county and sub county health management teams, slow decision making due to community influence and cases where some hospital managers were not awarded the positions based on merit. KI2 reiterated that hospital management was still centralized with the devolved units as decisions were made by the county executives thus hampering service delivery to some extent.

4.7 Delivery of Health Services in Wajir County

The study further assessed the delivery of health services in Wajir County where the public health facility managers reacted to six (6) items formulated based on adopted measures or indicators of delivery of health services in their facilities since the transition to devolution. The responses of these managers are presented in Table 4.6. The study established that on average, the healthcare workers in public health facilities in Wajir County were always available to offer the requisite services needed by patients to a great extent given the mean of responses of 3.612. In the same vein, on average, the services provided in these facilities were at all times safe and effective in meeting the needs of patients and the number of patients served on a daily basis had been increasing to great extent as supported by the mean values of 3.544 and 3.524 respectively. Other indicators of delivery of health services in public health facilities such as patients always being served promptly and significant reduction in waiting times, minimal patient complaints regarding the services provided and medical staff/specialists being easily accessible to patients at all times had been realized to a moderate extent as attested by the mean values of 3.388, 3.165 and 3.146 respectively. The overall mean value of 3.396 for the construct was an indication that on average, the statements presented to public health facility managers to a moderate extent, described the delivery of health services in public health facilities in Wajir County since the transition to devolution. The findings suggested that need for pursuing improved and optimized delivery of health services in Wajir County was still rife despite 12 years of devolution.

Table 4.6: Descriptive Statistics on Delivery of Health Services in Wajir County

Statement	Not at All	Small Extent	Moderate Extent	Great Extent	Very Great Extent	Mean	SD
The healthcare workers in this facility are always available to offer the requisite services needed by patients.	0.00%	21.40%	20.40%	34.00%	24.30%	3.612	1.078
The services provided in this health facility are at all times safe and effective in meeting the needs of patients.	0.00%	18.40%	28.20%	34.00%	19.40%	3.544	1.008
The number of patients served on a daily basis in this health facility has been increasing.	1.00%	15.50%	33.00%	31.10%	19.40%	3.524	1.008
Patients visiting this health facility are always served promptly and the waiting times have reduced significantly.	0.00%	19.40%	31.10%	40.80%	8.70%	3.388	0.899
Patient complaints regarding the services provided in this facility are minimal.	6.80%	29.10%	16.50%	35.90%	11.70%	3.165	1.172
Medical staff or specialists in this health facility are easily accessible to patients at all times	12.60%	18.40%	23.30%	33.00%	12.60%	3.146	1.232
Composite Mean and Standard Deviation						**3.396**	**0.669**
Valid N=103							

The results in Figure 4.4 outline the various aspects of devolved governance that that needed to be prioritized in a bid to enhance the delivery of health services in the various public health facilities in Wajir County according to the public facility managers.

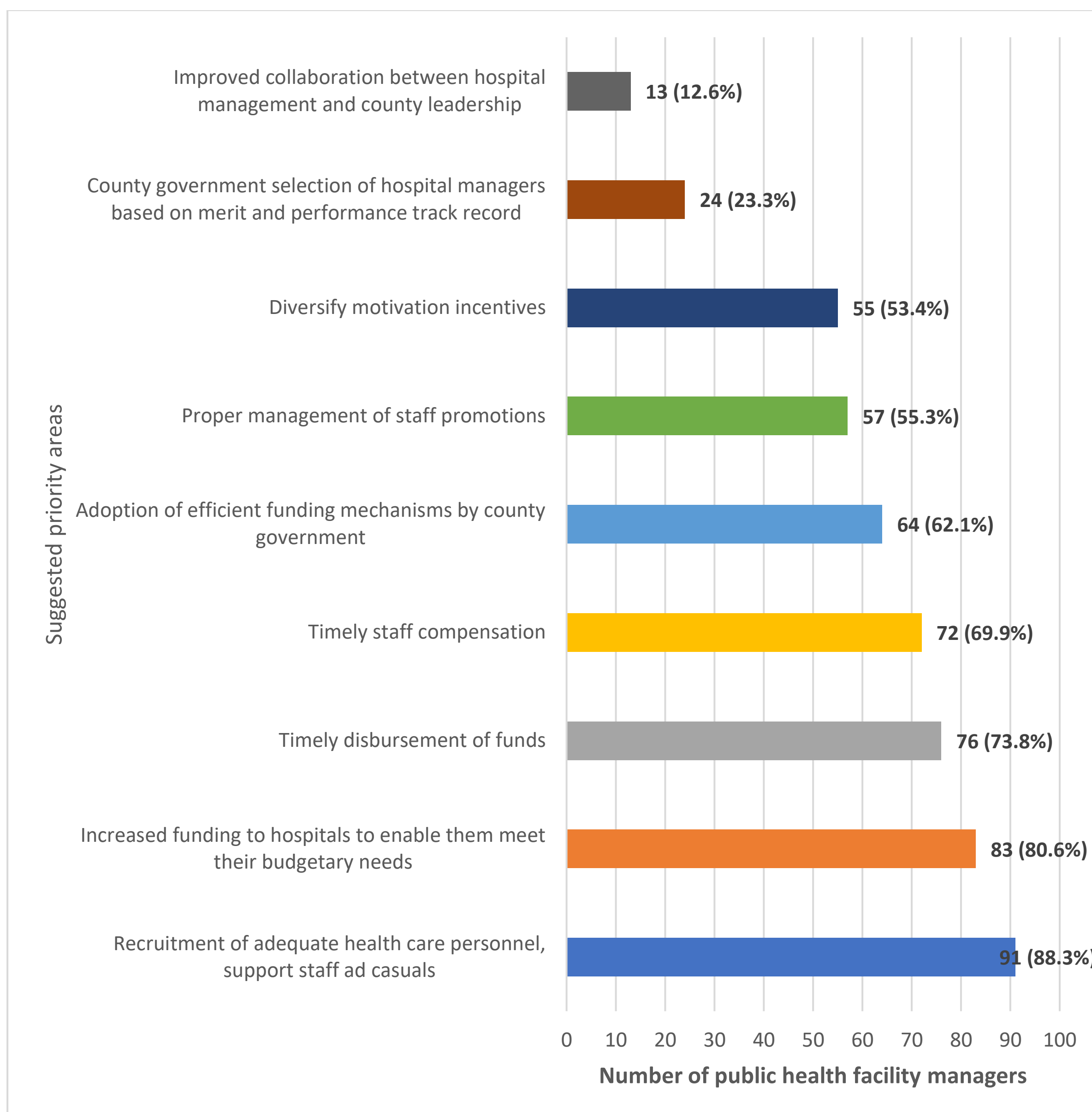

Figure 4.4: Devolved Governance Priority Areas as Proposed by Facility Managers

From Figure 4.4, it was evident that majority of the public health facility managers (88.3%) emphasized the need for the county government to recruit adequate healthcare personnel, support staff and casual workers to address the healthcare needs of increasing population. Along these lines, employment of the universal health coverage (UHC) staff who had worked on contract basis for the past 4 years was suggested. Increased funding to hospitals to enable them meet their budgetary needs and timely disbursement of funds were underlined by 80.6% and 73.8% of the managers respectively. Timely staff compensation, the adoption of efficient funding mechanisms by the county government and proper management of staff promotions highlighted by 69.9%, 62.1% and 55.3% of the facility managers. About 53.4% of the public health facility managers underscored the need for diversified motivation incentives for

employees while the selection of hospital managers based on merit and performance track record was reiterated by 23.3% of these managers. Improved collaboration between hospital management and county leadership was also recommended by 12.6% of the facility managers.

The county health management team members also suggested various measures necessary in enhancing the effectiveness of devolved governance in transforming the delivery of health services in Wajir County. Providing optimal funding, sustained and timely disbursement of funds for smooth facility operations and increased health staffing were emphasized by these officials. Streamlined health management, establishment of independent hospital management boards and sponsoring more hospital management team members to attend leadership and management trainings were other measures underlined by the county health management team members.

4.8 Correlation Analysis

As part of inferential analysis, correlation analysis was conducted to establish if there was correlation or association between devolved health staffing, devolved health financing and devolved hospital management/leadership and delivery of health services in Wajir County. In this case, Pearson's correlation analysis was undertaken where the computed correlation coefficients (r) and their corresponding significance (p) values were evaluated in determining the direction, strength and significance of the associations between the study variables. To interpret the strength or magnitude of the correlations, the following criteria proposed by Padilla et al. (2019) was adopted: +/- 0.00 to 0.19 is very weak correlation, +/- 0.20 to 0.39 is weak correlation, +/- 0.40 to 0.59 is moderate correlation, while +/- 0.60 to 0.79 and +/- 0.80 to 1.00 pointed to strong and very strong correlations. The critical p value was also set at 0.05 where a computed value less than 0.05 was an indication of a significant correlation, otherwise, insignificant. Table 4.7 provides the correlation matrix.

Table 4.7: Correlation Matrix

		Delivery of Health Services	Devolved Health Staffing	Devolved Health Financing	Devolved Hospital Management or Leadership
Delivery of Health Services	Pearson Correlation	1			
	Sig. (2-tailed)				
	N	103			
Devolved Health Staffing	Pearson Correlation	.738**	1		
	Sig. (2-tailed)	0.000			
	N	103	103		
Devolved Health Financing	Pearson Correlation	.746**	.537**	1	
	Sig. (2-tailed)	0.000	0.000		
	N	103	103	103	
Devolved Hospital Management or Leadership	Pearson Correlation	.730**	.503**	.542**	1
	Sig. (2-tailed)	0.000	0.000	0.000	
	N	103	103	103	103
** Correlation is significant at the 0.01 level (2-tailed).					

The findings presented in Table 4.7 showed that the correlation between devolved health staffing and delivery of health services in Wajir County was positive, strong and significant as revealed by r=0.738 and p=0.000. Similarly, devolved health financing as well as devolved hospital management/leadership were positively and significantly correlated with the delivery of health services in Wajir County as supported by (r=0.746, p=0.000) and (r=0.730, p=0.000) respectively. The correlations were also deemed strong. The study results generally demonstrated that devolved health staffing, devolved health financing and devolved hospital leadership and delivery of health services in Wajir County changed in the same direction. Hence, it can be inferred that the association between devolved governance and delivery of health services in Wajir County was positive, strong and significant. Moreover, the results showed that devolved health staffing, devolved health financing and devolved hospital management/leadership were fit to be included as predictor variables when conducting regression analysis as they were significantly correlated with the dependent variable.

4.9 Regression Analysis

In determining the relationship between devolved governance and delivery of health services in Wajir County, regression analysis was conducted. Multiple regression analysis was undertaken where the joint effect of devolved health staffing, devolved health financing and devolved hospital management/leadership on delivery of health services in this county was determined by examining the regression estimates generated. The significance of the effect of each independent variable on the dependent variable was determined by assessing the significance or *p* value associated with the computed beta (β) coefficients where a *p* value less than 0.05 showed that the effect was significant, otherwise, insignificant. After carrying out the regression analysis, three outputs were generated and have been explained under various subsections.

4.9.1 Model Summary

Table 4.8 contains the model summary results deemed crucial in revealing the variance in the dependent variable that resulted from variance in the independent variables considered in the regression analysis. In this case, the coefficient of determination or R Square was evaluated.

Table 4.8: Model Summary Results

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.892a	0.795	0.789	0.307604
a Predictors: (Constant), Devolved Hospital Management/Leadership, Devolved Health Staffing, Devolved Health Financing				

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As shown in Table 4.8, the computed R Square was 0.795 implying that 79.5% of the variance in delivery of health services in Wajir County was attributed to the variance in devolved health staffing, devolved health financing and devolved hospital management/leadership. The rest of the variance in the delivery of health services in this county was linked to variance in other factors not considered in this study. It can therefore be implied that devolved governance operationalized in terms of devolved health staffing, devolved health financing and devolved hospital management/leadership contributed to significant variance or changes in the delivery of health services in Wajir County.

4.9.2 Significance of the Regression Model

The ANOVA results contained in Table 4.9 were used in assessing whether the multiple regression model used in determining the relationship between devolved health staffing, devolved health financing and devolved hospital management/leadership and delivery of health services in Wajir County was a good fit for the data used. This simply meant checking if the model was significant or how well the model would predict a future set of observations. Consequently, the calculated *F* statistic and the associated *p* value were examined.

Table 4.9: Model Significance Results

Model		Sum of Squares	df	Mean Square	F	Sig.
	Regression	36.304	3	12.101	127.895	.000b
	Residual	9.367	99	0.095		
1	Total	45.672	102			
a Dependent Variable: Delivery of Health Services in Wajir County						
b Predictors: (Constant), Devolved Hospital Management/Leadership, Devolved Health Staffing, Devolved Health Financing						

From the results presented in Table 4.9, the calculated $F(3, 99) = 127.895$ and $p=0.000$, $p<0.05$. From these findings, it can be inferred that the model used to show the relationship between devolved health staffing, devolved health financing and devolved hospital management/leadership and delivery of health services in Wajir County was significant as the *p* value obtained was less than 0.05. Thus, using this model, it was possible to predict the delivery of health services in Wajir County when the values of devolved health staffing, devolved health financing and devolved hospital management/leadership were provided. Also, the findings suggested that the adopted three measures of devolved governance significantly predicted the delivery of health services in this county.

4.9.3 Regression Estimates

The regression estimates presented in Table 4.10 were examined in a bid to determine the effect that devolved health staffing, devolved health financing and devolved hospital management/leadership had on delivery of health services in Wajir County. The significance of the effect of these variables on delivery of health services in this county was also assessed by examining the computed significance (*p*) values where a value less than 0.05 indicated that the effect was significant and vice versa.

Table 4.10: Regression Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	0.763	0.150		5.078	0.000		
	Devolved Health Staffing	0.283	0.043	0.371	6.558	0.000	0.648	1.543
	Devolved Health Financing	0.257	0.042	0.357	6.129	0.000	0.612	1.634
	Devolved Hospital Management/ Leadership	0.319	0.052	0.350	6.164	0.000	0.643	1.555
a Dependent Variable: Delivery of Health Services in Wajir County								

The study results in Table 4.10 revealed that devolved health staffing had a positive significant effect on the delivery of health services in Wajir County as illustrated by ($\beta = 0.283$, $p = 0.000$). These results suggested that increasing devolved health staffing by one unit would result to increased delivery of health services in this county by 0.283 units holding all other factors constant. It was also established that delivery of health services in Wajir County was also positively and significantly affected by devolved health financing as supported by ($\beta = 0.257$, $p = 0.000$). Holding all other factors constant, a unit increase in devolved health financing would lead to improved delivery of health services in Wajir County by 0.257 units. Devolved hospital management/leadership was also found to have a positive and significant effect on the delivery of health services in Wajir County as demonstrated by ($\beta = 0.319$, $p = 0.000$). When all other factors were held constant, a unit increase in devolved hospital management would result to enhanced delivery of health services in this county by 0.319 units. From the above findings, it was evident that devolved governance positively and significantly affected the delivery of health services in Wajir County. Devolved hospital management/leadership had the greatest effect on the delivery of these services followed by devolved health staffing. Thus, it can be inferred that improved devolved governance would considerably enhance delivery of health services in Wajir County. The optimal model for the study based on computed regression estimates is provided as follows: -

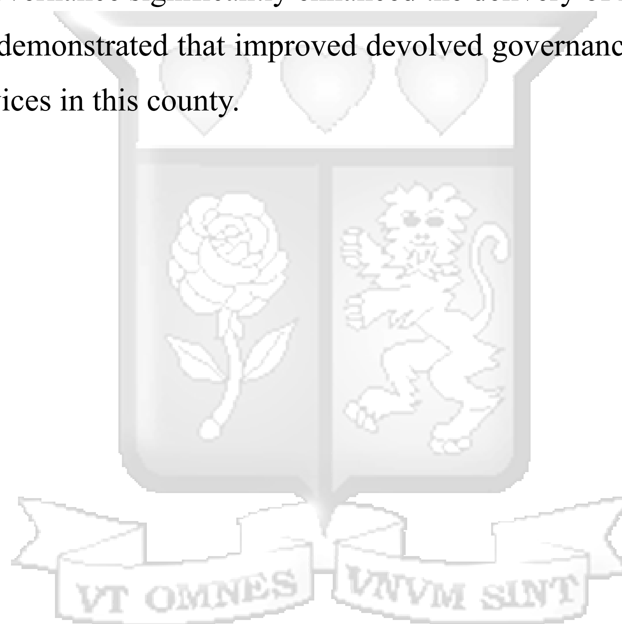
$$\mathbf{Y = 0.763 + 0.283X_1 + 0.257X_2 + 0.319X_3}$$

Where: **Y** = Delivery of health services in Wajir County, $\mathbf{X_1}$ = Devolved health staffing, X_2 = Devolved health financing, $\mathbf{X_3}$ = Devolved hospital leadership/management

The collinearity statistics showed that the data used did not suffer from the multicollinearity problem since the VIF values corresponding to all the independent variables were less than 5.

4.10 Chapter Summary

The findings of this study and their interpretations were adequately presented in this chapter. Generally, the findings showed that a positive significant relationship existed between devolved governance and delivery of health services in Wajir County. In particularly, devolved health staffing, devolved health financing and devolved hospital leadership/management as key aspects of devolved governance significantly enhanced the delivery of health services in Wajir County. The findings demonstrated that improved devolved governance was key to enhanced delivery of health services in this county.



CHAPTER FIVE: CHAPTER FIVE: SUMMARY, DISCUSSIONS, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

This chapter contains a summary of the key study findings and their discussion. The conclusions drawn, the major recommendations for practice and policy, the study limitations and suggested areas for further research are also highlighted.

5.2 Summary and Discussion of Findings

The major objective of this study was to investigate the effect of devolved governance on delivery of health services in Wajir County, Kenya. To meet this objective, three specific objectives were formulated. The major findings under each objective were summarized and discussed in relation to the findings of existing relevant studies.

5.2.1 Devolved Health Staffing and Delivery of Health Services in Wajir County

The study sought to determine the effect of devolved health staffing on delivery of health services in Wajir County. From the content and descriptive analysis conducted, the study observed that while devolution had brought about various changes in health staffing in Wajir County, several priority areas among them, staff adequacy and compensation, capacity building initiatives and incentives for motivating staff needed significant improvements to enable full realization of devolved health function objectives. Similar observations were made by Masaba et al. (2020) who found that, even though devolution had resulted to the employment of extra new health personnel in counties, the staff available remained inadequate. The study finding also resonated with the argument posed by Ntayia and Moi (2022) that, concerns related to training, compensation and incentives for motivating critical human resources were pertinent staffing factors in Kenyan county governments.

The study determined that devolved health staffing and the delivery of health services in Wajir County were positively, strongly and significantly correlated based on the correlation analysis undertaken. Regression analysis also revealed a positive significant relationship between devolved health staffing and the delivery of health services in this county. The study established that the delivery of health services in Wajir County was positively and significantly affected by devolved health staffing. This implied that improved devolved health staffing would considerably enhance the delivery of health services in this county. These study findings were consistent with the conclusion made by Masaviru, Namusonge and Nambuswa (2021) that

devolved management of human resources significantly influenced the delivery of healthcare services. The study also supported the argument by Muwonge et al. (2022) that devolution was a means of boosting delivery of critical health services in Kenya as counties had maintained and, in many cases, significantly expanded the levels of, and access to healthcare services.

5.2.2 Devolved Health Financing and Delivery of Health Services in Wajir County

The study also examined the effect of devolved health financing on delivery of health services in Wajir County. The study noted that health financing in Wajir County was still wanting despite the transition to devolution. Among the major health financing challenges in this county was the inadequate funds allocated to public health facilities, their delayed and unpredictable disbursement and the limited financial autonomy that these facilities had in the utilization of the funds. The above state of affairs was also reported in several other studies undertaken in different counties in Kenya. Rufo (2019) and Wanzala and Oloo (2019) had reported that inadequate and delayed funding by county governments was a major challenge facing public health facilities in the nation while Kimathi (2017) underlined that several inconsistencies in funds allocations to health facilities in counties adversely affected critical functions. In addition, the studies by Mbuthia et al. (2019) and Kairu et al. (2021) indicated that public health facilities in different counties lacked financial autonomy over the revenues they generated.

The correlation analysis revealed that there was a positive, strong and significant association between devolved health financing and delivery of health services in Wajir County. The regression analysis results also confirmed that devolved health financing positively and significantly affected the delivery of health services in this county. Hence, improved devolved health financing would significantly boost the delivery of health services in Wajir County. These findings concurred with an observation made by Njiru, Tenambergen and Oluoch (2018) that devolved healthcare financing positively and significantly influenced health services delivery. The findings also supported the assertion by Indiazi (2021) that devolved healthcare financing substantially enhanced the delivery of health services in public health facilities.

5.2.3 Devolved Hospital Leadership/Management and Delivery of Health Services in Wajir County

The study further sought to establish the effect of devolved hospital leadership/management on delivery of health services in Wajir County. The study findings suggested that hospital leadership/management in this county under devolution was to some extent laudable though various improvements were needed in order to realize devolution objectives. Priority areas of

improvement pertained to the technical and professional expertise of hospital management teams, their management skills, independence and control over management functions as well as the efficiency of decision-making structures. The finding echoed the argument by Kimathi (2017) that while management teams of public health facilities in Kenya had extensive technical and professional expertise, most of them lacked sufficient strategic management skills needed in accessing and prudently using the resources. Baraza et al. (2017) had also established that devolution had resulted to reduced hospital autonomy which weakened hospital leadership and management structures an observation also made in this current study.

The study noted a positive, strong and significant correlation between devolved hospital leadership/management and delivery of health services in Wajir County. Regression analysis results also demonstrated that devolved hospital leadership/management had a positive significant effect on the delivery of health services in this county as well. Therefore, boosting devolved hospital leadership/management would substantially enhance the delivery of health services in Wajir County. The study findings backed the conclusion by Muchomba (2015) that devolved organizational leadership significantly improved the quality of services provided in public health facilities as it led to faster decision making. The findings also supported the argument by Njoroge and Moi (2020) that devolved hospital management resulted to improved service delivery since it improved communication between hospital administrators and staff in other levels. Andrew (2020) had also reported that devolved hospital leadership significantly enhanced efficiency in service delivery in public health facilities.

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5.3 Conclusions

The study concluded that devolved governance in Wajir County in as far as the health function was concerned, was work in progress as several improvements in health staffing and financing as well as hospital leadership/management, were required after nearly 12 years of devolution. The study also concluded that devolved governance had a positive significant effect on the delivery of health services in Wajir County. Precisely, the study concluded that devolved health staffing, devolved health financing and devolved hospital leadership/management positively and significantly affected the delivery of health services in this county. On this basis, it was concluded that improved devolved governance would considerably enhance the delivery of health services in Wajir County. The study further concluded that devolved governance was a critical factor that needed consideration when evaluating the factors likely to affect the delivery of health services in Wajir County.

5.4 Recommendations

Based on the study findings, the study recommends that: -

The county government management should progressively increase the budgetary allocations to the health function and ultimately the allocations to health facilities in a bid to match their budgeted needs. To achieve this, vigorous resource mobilization strategies should be pursued to boost own source revenues and funding from other diverse sources so as to supplement the allocations from the national government.

To enhance the financial autonomy of public health facilities, the county government could consider enacting and passing laws that would allow these facilities retain and use the revenues they generated and also have autonomy over various decisions pertaining to their operations such as procuring medical supplies and recruiting and managing casual personnel.

The county government should adopt efficient funds disbursement mechanisms that incentivize public health facilities to deliver quality and efficient health services. Moreover, the county government executive needed to persistently lobby for timely and predictable funds disbursements from the national government so as has to limit incidences such as delayed staff salaries which disrupted facility operations.

The county government in consultation with relevant health facility departments should set aside incremental budgets to facilitate the recruitment of significant additional staff across all cadres and also support regular capacity building initiatives based on the identified training needs of staff.

There is need for the county government through the health department to offer staff at all levels, monetary and non-monetary motivation incentives in order to boost their morale. Moreover, there should established structures and systems that govern the efficient and sustainable implementation of these incentives. The county government should also comply or effectively implement existing recruitment and promotional policies to ensure the proper management of staff recruitments and promotions across the county.

The county government should support the formation of competent and independent hospital management boards that have significant control over key managerial roles in public health facilities. Moreover, health management teams at different levels should embrace decision making structures that support consultation rather than dominance and influence when making and implementing key decisions affecting healthcare in the county.

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The county government through the health department should forge partnerships with willing medical and other learning institutions aimed at expanding the short term and specialized training opportunities accorded to the county health staff. Moreover, sustained partnership with the Kenya School of Government is key in ensuring that more hospital management teams receive relevant trainings in management and leadership.

5.5 Limitations of the Study

The major limitation in this study pertained to the accessibility of the public health facility managers who were spread out across the vast county of Wajir as well as the tight university schedules and deadlines. In mitigating these limitations, the questionnaire was administered through a combination of drop and pick later method and via online platforms. Two trained research assistants were approached to help in the data collection exercise. The necessary adjustments to the research work plan were also made to ensure its alignment with the university schedules.

At the initial stages of the data collection exercise, some of the respondents did not want to take part in the study as they feared that the information they would give, might be used against them especially due to the positions they held. However, through judicious clarifications regarding the purpose of the study, the benefits and risks involved and also the efforts to conceal their identity and maintain utmost confidentiality in the entire exercise, a good number of the targeted respondents participated in the study. This was reflected in the successful response rate of the study.

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5.6 Suggestions for Further Research

The study suggests that a replica of this study targeting all the county governments in Kenya can be undertaken for comparative purposes. Comparative studies involving other nations that had embraced devolved governance in their health functions can also be considered to find out if there are valuable lessons that the county government or the nation at large, can learn. Studies that explore the implications of devolved governance on delivery of health services alongside other components of healthcare systems such as health information and technologies as a whole, can also be carried out. Studies that integrate various intervening variables when assessing the implications of devolved governance on health services delivery are highly recommended. The impact of devolved governance on other aspects of healthcare aside from delivery of health services can also be assessed. In the near future, time series analyses can also be conducted to reveal various crucial trends.

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APPENDICES

Appendix I: Participant Informed Consent Form

1. INTRODUCTION

My name is Abukar Mohamed, a masters' student at Strathmore University. In pursuit of my degree, I have embarked on a study on the "**Effect of devolved governance on health services delivery in Wajir County**". Owing to your role in the health function in this county, you have been considered a participant in this study.

2. WHAT THE STUDY ENTAILS

The study entails collecting your opinions and views as regards to devolution health governance in terms of devolved health staffing and funding as well as devolved hospital leadership/management and their implications for delivery of health services in Wajir County. The exercise will take about 15 to 30 minutes of your time.

3. POTENTIAL BENEFITS

No compensation will be given to you, however, by providing the required information, crucial recommendations which can be used to improve the delivery of healthcare services in Wajir County will be provided.

4. PRIVACY AND CONFIDENTIALITY

All the information gathered from you and other respondents will not be accessed or shared with anyone else apart from the research team. This information will be held in confidence and to protect your identity, anonymous responses will be considered.

5. USE OF RESEARCH FINDINGS

The findings of this research study will only be used for research purposes only.

6. PARTICIPATION AND WITHDRAWAL FROM THE RESEARCH

You have a choice to or not participate in this study. If you choose to engage in this exercise, the process will be voluntary and you can choose to pull out of the exercise any time or at any phase of you do not wish to continue with the exercise without any penalties.

7. CONTACT INFORMATION

If you wish to seek any information or clarification, you can contact me on +254725336313 and through email at: adurows@gmail.com

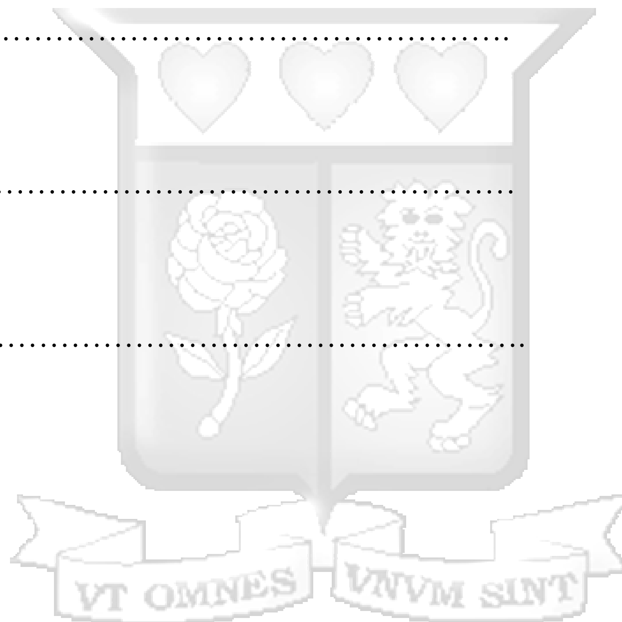
8. CONSENT TO BE PART OF THE RESEARCH EXERCISE

I have read and understood the information provided in this form. I have been accorded the chance to raise various questions in seeking clarity and these questions have been adequately addressed. I voluntarily consent to participate in this research exercise by providing the sought information.

Name ……………………………………………………………

Signature ………………………………………………………

Date ……………………………………………………………….

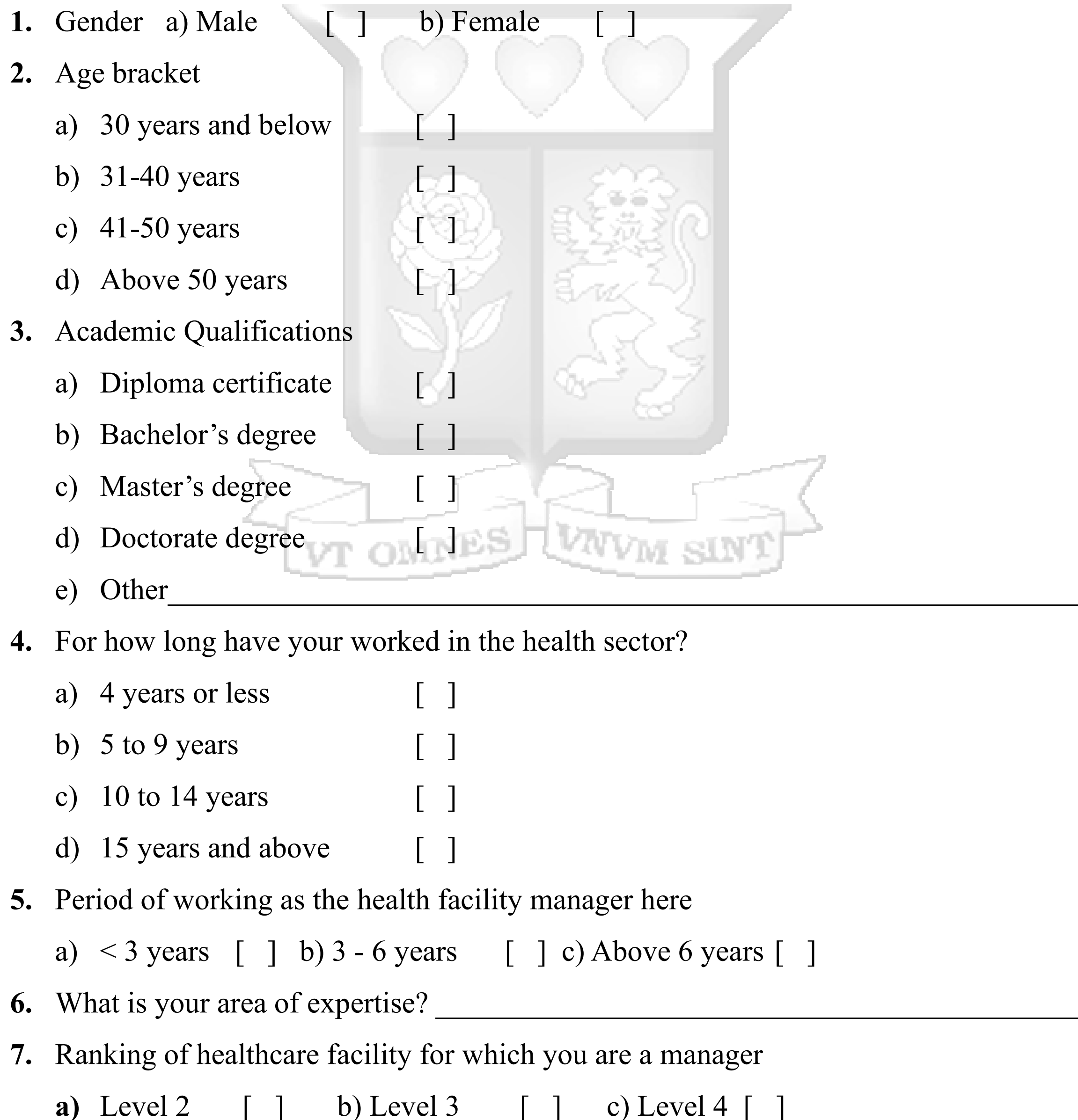


Appendix II: Questionnaire for Health Facility Managers

Serial No.: ……………….

My Name is Abukar Mohamed and am carrying out a research study on the effect of devolved governance on health services delivery in Wajir County. I hope you can spare some of your time to help me answer few questions. Your participation will enable me to understand better the healthcare situation in this county. You are not under obligation to participate in the study. All information received from you will be held in confidence and used solely for this study. Do not write your name anywhere in this questionnaire.

SECTION A: RESPONDENT BIO-PROFILE



1. **Gender** a) Male [ ] b) Female [ ]
2. **Age bracket**
   a) 30 years and below [ ]
   b) 31-40 years [ ]
   c) 41-50 years [ ]
   d) Above 50 years [ ]
3. **Academic Qualifications**
   a) Diploma certificate [ ]
   b) Bachelor's degree [ ]
   c) Master's degree [ ]
   d) Doctorate degree [ ]
   e) Other____
4. For how long have your worked in the health sector?
   a) 4 years or less [ ]
   b) 5 to 9 years [ ]
   c) 10 to 14 years [ ]
   d) 15 years and above [ ]
5. Period of working as the health facility manager here
   a) < 3 years [ ] b) 3 - 6 years [ ] c) Above 6 years [ ]
6. What is your area of expertise? ____
7. Ranking of healthcare facility for which you are a manager
   a) Level 2 [ ] b) Level 3 [ ] c) Level 4 [ ]

SECTION B: DEVOLVED HEALTH STAFFING

8. Kindly indicate the extent the following statements describe the staffing condition in this health facility following devolution of the health function.

Statement	Not at All	Small Extent	Moderate Extent	Great Extent	Very Great Extent
a) There has been recruitment of more health workers in this health facility since the devolution of health function.					
b) The number of personnel employed in this facility is adequate/optimal across all critical areas and cadres.					
c) All the staff in this facility were recruited on merit basis and have the recommended competencies, skills and experience required in critical areas.					
d) The compensation packages for employees in all cadres in this facility are competitive enough to enhance their morale.					
e) Staff compensation in this health facility is usually prompt and timely.					
f) Health personnel in this health facility are usually accorded opportunities for regular and relevant training and development to boost their capacity.					
g) There are in place diverse incentives for motivating and enhancing performance of staff in all critical areas and cadres in this health facility.					

9. How has devolved health staffing affected delivery of health services in this health facility?

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SECTION C: DEVOLVED HEALTH FUNDING

10. To what extent do you agree with the following statements on the financing of operations in this health facility following transition to devolution.

Statement	Not at All	Small Extent	Moderate Extent	Great Extent	Very Great Extent
a) The funding flows to this health facility from the county government are always sufficient enough to finance the hospital budget.					
b) The funds allocated to this health facility by the county government are always predictable and disbursed on time.					
c) There are in place efficient mechanisms for ensuring prudent and efficient allocation of funds channeled to this health facility.					
d) There is always accountability in the way funds allocated to this health facility by the county government are spend.					
e) The funding received by this health facility from the county government matches the amounts allocated to similar facilities in the county.					
f) This health facility has some level of autonomy in the use of funds allocated to it by the county government.					

11. How has devolved health funding affected the delivery of health services in this health facility?

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SECTION D: DEVOLVED HOSPITAL MANAGEMENT

12. To what extent do the following statements describe the leadership/management of this health facility following transition to devolution.

Statement	Not at All	Small Extent	Moderate Extent	Great Extent	Very Great Extent
a) The management and leadership of this health facility is made up of individuals with adequate relevant technical and professional expertise.					
b) The management and leadership of this health facility is steered by persons who possess crucial management skills.					
c) The management and leadership of this health facility usually makes timely decisions pertaining to any issue concerning the running of the facility operations and service delivery.					
d) The management and leadership of this health facility has most of the times been able to carry out its managerial roles without the influence from the county government leadership.					
e) The management and leadership of this health facility is always accessible to the public and other key stakeholders for easier collaboration.					
f) The management and leadership of this health facility always maintains open and transparent timely communication with staff as one of its values for enhanced efficiency.					

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13. Indicate the ways in which devolved hospital management and leadership has affected the delivery of services in this health facility?

____

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____

____

SECTION E: DELIVERY OF HEALTH SERVICES

14. Kindly indicate the extent the following statements describe the delivery of health services in this health facility since the transition to devolution.

Statement	Not at All	Small Extent	Moderate Extent	Great Extent	Very Great Extent
a) The services provided in this health facility are at all times safe and effective in meeting the needs of patients.					
b) The number of patients served on a daily basis in this health facility has been increasing.					
c) Patients visiting this health facility are always served promptly and the waiting times have reduced significantly.					
d) Medical staff or specialists in this health facility are easily accessible to patients at all times.					
e) The healthcare workers in this facility are always available to offer the requisite services needed by patients.					
f) Patient complaints regarding the services provided in this facility are minimal.					

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15. What are your final thoughts regarding the implications of devolved governance on the delivery of health services in this health facility and the county in general?

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Appendix III: Key Informants Interview Guide for County Health Management Team Members

The following questions will be asked during the interview sessions with the county health management team members.

1. For how long have you worked with the County Government of Wajir and in which capacity?
2. What is your general understanding of devolved governance particularly in relation to health function?
3. Bearing in mind the pre-devolution conditions,

   (i) What is your assessment of devolved health staffing in this county/sub-county in terms of the following

   a) Staff adequacy ((i) How has the number of health workers changed pre and during devolution? (ii) How many health care workers have been hired since 2013? (iii0 How many health care workers have been fired since 2013? (iii) How many health care workers have resigned since 2013? (iv) How many health care workers have been promoted since 2013? (v) What is the doctor to patient ratio in the delivery of health service in Wajir County?)
   b) Staff competency and skills
   c) Staff compensation ((i) Competitiveness of compensation packages, (ii) Timeliness of salaries)
   d) Capacity building initiatives (for instance, how many health care workers have been sponsored for specialized training from the county 2013?)
   e) Motivation incentives

   (ii) In your opinion, how has devolved health staffing affected health service delivery in this county/sub county? (Probe in terms of availability, timeliness, quality, accessibility and patient satisfaction with services offered at facility level)

   (iii) What are your views on devolved health financing in this county/sub-county in terms of the following

   a) Adequacy/sufficiency of financing channeled to health department and facilities (increase/decrease in funding, allocation to health department) since 2013
   b) Timing/predictability of funds disbursements to facilities

c) Fairness in funds allocation/disbursements to facilities
d) Prudent funds allocation and use by facilities (for instance, system for tracking and auditing budget expenditures)
e) Financial autonomy of health facilities

(iv) How has devolved health financing affected health service delivery in this county/sub county? (Probe in terms of availability, timeliness, quality, accessibility and patient satisfaction with services offered at facility level)

(v) What is your assessment of devolved hospital management/leadership in this county/sub county based on the following indicators

a) Technical and professional expertise of facility/hospital management/leadership teams
b) Possession of strategic management skills among facility/hospital management/leadership teams
c) Decision making structures in health facilities (Probe timeliness of decisions made by facility/hospital management/leadership teams, are there bureaucracies noted?)
d) Independence of facility/hospital management/leadership teams when discharging different managerial roles (to what extent do county health officials influence decisions at health facility level)
e) Communication with staff (Probe whether devolution has improved the communication between hospital/facility management and staff)
f) Accessibility by public/stakeholders (How accessible facility/hospital management/leadership teams are to members of the public and other key stakeholders)
g) Control over key management functions (How much power and control do facility/hospital management/leadership teams have over key facility management functions)

(vi) How has devolved hospital management affected health service delivery in this county/sub county? (Probe in terms of availability, timeliness, quality, accessibility and patient satisfaction with services offered at facility level)

4. What measures do you suggest to be taken to enhance the effectiveness of devolved governance in transforming the delivery of health services in counties?

Appendix IV: Ethical Approval from the University

28th September 2023

Mr Mohamed Abukar Samow,
adurows@gmail.com

Dear Mr Mohamed,

RE: Effect of Devolved Governance on Delivery of Health Services in Wajir County, Kenya

This is to inform you that SU-ISERC has reviewed and **approved** your above SU-**masters** research proposal. Your application reference number is **SU-ISERC1871/23.** The approval period is from **28th September 2023 to 27th September 2024.**

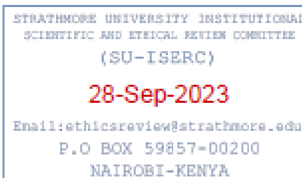
This approval is subject to compliance with the following requirements:

i. Only approved documents including (informed consents, study instruments, MTA) will be used.
ii. All changes including (amendments, deviations, and violations) are submitted for review and approval by SU-ISERC.
iii. Death and life-threatening problems and serious adverse events or unexpected adverse events whether related or unrelated to the study must be reported to SU-ISERC within 72 hours of notification.
iv. Any changes anticipated or otherwise that may increase the risks or affected safety or welfare of study participants and others or affect the integrity of the research must be reported to SU-ISERC within 72 hours.
v. Clearance for the export of biological specimens must be obtained from relevant institutions.
vi. Submission of a request for renewal of approval at least 60 days prior to the expiry of the approval period. Attach a comprehensive progress report to support the renewal.
vii. Submission of an executive summary report within 90 days of completion of the study to SU-ISERC.

Before commencing your study, you will be expected to obtain a research license from National Commission for Science, Technology, and Innovation (NACOSTI) https://research-portal.nacosti.go.ke/ and obtain other clearances needed.

Yours sincerely,

Mr Ambrose Rachier,
Chairperson; SU-ISERC



Ole Sangale Rd, Madaraka Estate. PO Box 59857-00200, Nairobi, Kenya. Tel +254 (0)703 034000
Email admissions@strathmore.edu www.strathmore.edu

Appendix V: Authorization Letter from the Department of Medical Services, Public Health and Sanitization, Wajir

DEPARTMENT OF MEDICAL SERVICES, PUBLIC HEALTH AND SANITATION, WAJIR

When replying, please
Quote our Ref & Date

Ref: WCG/P037/2023

WAJIR HEALTH SERVICES
RESEARCH & DEVELOPMENT,
P O Box 2 – 70200
WAJIR

6th December 2023

Mr. Abukar Samow Mohamed,
Strathmore University,
Ole Sangale Road, Madaraka,
P.O. Box 59857 – 00200,
Nairobi, Kenya.

RE: AUTHORIZATION TO CONDUCT STUDY TITLED EFFECT OF DEVOLVED GOVERNANCE ON DEILIVERY OF HEALTHSERVICES IN WAJIR COUNTY, KENYA

In reference to your request on the above subject, you are hereby granted permission to conduct the research study in the County. Your approval number is WCG/P0037/2023 and it is valid for six (6) months (Exp. 5th June 2024).

Kindly ensure that all ethical issues are observed and respected throughout the study. The Ministry of Health regulations for prevention and control of spread of communicable diseases should be adhered to during data collection. Any changes in the data collection method need to be brought to the attention of the research office. Kindly note that there is no clearance for any blood or biological sample collection or administration of any medical substance.

You are also required to share with us the progress and the final report of the study for our own consumption as a county.

Please do not hesitate to contact the undersigned for any other query.

Yours Sincerely,

Dr. Mohamed A. Ahmed
Director of Health Research & Development, Wajir

CDRO Contact: 0722689038

Appendix VI: Research Permit from NACOSTI

REPUBLIC OF KENYA

NATIONAL COMMISSION FOR SCIENCE,TECHNOLOGY & INNOVATION

Ref No: **228301**

Date of Issue: **16/October/2023**

RESEARCH LICENSE

This is to Certify that Mr.. Abukar Samow Mohamed of Strathmore University, has been licensed to conduct research as per the provision of the Science, Technology and Innovation Act, 2013 (Rev.2014) in Wajir on the topic: EFFECT OF DEVOLVED GOVERNANCE ON DEILIVERY OF HEALTH SERVICES IN WAJIR COUNTY, KENYA for the period ending : 16/October/2024.

License No: **NACOSTI/P/23/30469**

228301

Applicant Identification Number

Director General
NATIONAL COMMISSION FOR SCIENCE,TECHNOLOGY & INNOVATION

Verification QR Code

NOTE: This is a computer generated License. To verify the authenticity of this document, Scan the QR Code using QR scanner application.

See overleaf for conditions

Appendix VII: Research Project Budget

DESCRIPTION OF ITEM	Unit Cost (Ksh.)	Quantity	Freq.(days/months)	TOTAL COSTING (KSH)
Internet Data	5000	1	3	15,000.00
Purchase of 4 audio recorders	4000	4	1	16,000.00
Printing (consent sheets, proposal)500 pages @ksh 10 per page	10	500	1	5,000.00
Airtime-calls(mins)	2	400	1	800.00
Transcription costs	1000	3	7	21,000.00
Stationery material	100	20	1	2,000.00
Transport-air tickets (round trip NBI-Wjr)	17000	1	1	17000.00
Accommodation	3500	1	100	35,000.00
Meals	2000	1	10	20,000.00
Enumerators	1000	7	5	35,000.00
Car Rental	4000	4	2	32,000.00
Contingency-10$	19,880	1	1	19,880.00
Total				**218,680.00**

Appendix VIII: Work Plan

Activity	Year (2023)										Year (2024)					
	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May
Concept and Title presentation																
Literature Review																
Proposal Write up and Presentation																
Data Collection																
Data Analysis																
Report writing																
Final Thesis