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Karugu, Lucy
Strathmore Business School
Strathmore University

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LUCY KARUGU

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LUCY KARUGU

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DECLARATION

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

Lucy Karugu

MBA-HCM/093036/16

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Approval

The dissertation of Lucy Karugu was reviewed and approved by:

Dr. Pratap Kumar

Institute of Healthcare Management

Dr. George Njenga

Executive Dean

Strathmore University Business School

Dr. Bernard Shiwabo

Director, Office of the Graduate Studies

ABSTRACT

This study assessed the dual practice of public hospital medical doctors at county referral hospitals in Nairobi, Kenya. The three-county referral hospitals under investigation were Pumwani hospital, Mbagathi hospital, and Mama Lucy hospital. Specifically, the study aimed to 1) establish the prevalence or extent of the dual practice of public hospital medical doctors; 2) determine forms and/or modes of dual practice of public hospital medical doctors; 3) identify factors that drive the dual practice of public hospital medical doctors; 4) find out reasons for commitment to public practice among public hospital medical doctors; and 5) examine consequences or impacts of dual practice of public hospital medical doctors. This study achieved these objectives through mixed methods of data collection and analysis. Moreover, the study adopted a descriptive online questionnaire survey with semi-structured and open-ended questions to collect data from 63 respondents (38 – medical doctors and 25 management teams) across the three hospitals under investigation. The Census sampling technique was adopted. The findings reported that the prevalence or extent of the dual practice of public hospital medical doctors is at 54%. Most public hospital medical doctors who engage in dual practice do so because of the low/negative perception they have on their current public practice income. The findings also indicate that the motivating factor or reason why most public hospital medical doctors engage in dual practice is to enhance their current income. That is to say, private practice income supplements public practice income. Though there exist dual practices among some public hospital medical doctors, the study established that some public hospital medical doctors, however, are committed to public practice. Results indicate that the responsibility to uphold public health for all and building reputation are some of the reasons some public hospital medical doctors are committed to public practice. Also, the study found out that faster promotion, increased salary, and provision of housing benefits are some of the conditions that would make the majority of the public hospital medical doctors who engage in dual practice give up their private practice for public practice. Consequently, the study findings report that consequences of the dual practice of public hospitals medical doctors varies and can either be positive or negative to the health system, patients, and public health institution. This study concludes that healthcare remains a development priority across nations. As the demand for health services increases so will the dual practice of public hospital medical doctors due to the growing disparity in the doctor-patient ratio. The study recommends the need for more policy frameworks on dual practice to work for the benefits of public hospitals. Also, the study recommends further research to focus on all county referral hospitals in Kenya with large sample size.

Key words: Dual practice, public hospital medical doctors, county referral hospitals

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DEDICATION

I sincerely dedicate this dissertation to my loving daughters Savannah Birya and Sierra Birya for their never ending encouragement and patience throughout the entire period of my academic endeavor. I wish them God's blessings and favor in their lives.

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ACRONYMS/ABBREVIATIONS

GDP	Gross Domestic Product
NGOs	Non-Governmental Organizations
SDGs	Sustainable Development Goals
UCH	Universal Health Coverage
UK	United Kingdom
WHO	World Health Organization

DEFINITION OF TERMS

Dual Practice Refers to a scenario in which a medical officer or doctor combines clinical practice in the public sector with a clinical practice in the private sector (Gonzalez & Macho-Stadler, 2013).

CHAPTER ONE

INTRODUCTION

1.1 Introduction

The present study endeavors to shed more light on the dual practice of public hospital medical doctors. Dual practice along with other issues in the public health practice remains an area of concern for health care management practitioners. Therefore, it is imperative to assess dual practice in order to provide additional knowledge and understanding on its prevalence, motivating factors, and consequences among other issues. This chapter of the study, thus, starts by providing a detailed background of the study, the statement of the problem, and the justification of the study. The chapter then provides the research objectives and research questions, the scope of the study, and the significance of the study.

1.2 Background of the Study

The need to provide quality, accessible, and affordable health services for all, has resulted in transformational changes in the health system. This is as a result of the ongoing devolution and strong commitment by the Government of Kenya to implement Universal Health Coverage (UHC) (Kenya Health Policy Forum, 2014). The public health sector remains the critical avenue for achieving UHC. Over 60% of Kenyans use public health facilities which in most cases are equitable. However, ensuring a functional primary health care system in the health sector faces some challenges which threaten quality service delivery. Such challenges include human resources, legal framework, governance and leadership wrangles, and the increased dual practice of public hospital medical doctors (Kimathi, 2017).

Similarly, the transition in the health sector, especially in the public facilities has been marred with inconsistencies, management issues, poor understanding of human resources for health (HRH) system, and spanning capacity issues both at the national and county referral hospitals (Kimathi, 2017). Reports of medical doctors in the public health facilities holding other positions in the private health facilities have been rampant. This can be in many forms; either inside or outside public health facilities.

As a result, service delivery in public health facilities has encountered increased challenges where individuals seeking health services either have to wait for long or get referred to private health facilities (McPake, Russo, Hipgrave, Hort, & Campbell, 2016).

At a time when such practices (where doctors hold two jobs; both in public and private hospitals) are ever-increasing in emerging economies (Alpaslan, Lim, & Song, 2019), there is a need to study the dual practice of public medical doctors. This study was critical in establishing the extent of dual practice, reasons associated with the dual practice, reasons for commitment in public practice, conditions under which dual practitioners are willing to give up a private practice for public practice, and the general consequences of dual practice.

1.2.1 Dual Practice

The dual practice of public hospital medical doctors is associated with various definitions. It may be used to refer to a doctor with many medical fields or specialties (Khun & Nuscheler, 2013). To others, a dual practice may refer to medical doctors who have many roles from clinical practice to other health-related activities like teaching or consultancy (Russo, Fronteira, Jesus, & Buchan, 2018). Similarly, the widely used definition and which this study aims to adopt refers to the dual practice as a scenario in which a medical doctor combines clinical practice in the public health sector with a clinical practice in the private health sector (Gonzalez & Macho-Stadler, 2013).

Given the relative need to serve the ever-growing patient population, most public doctors have been involved in private practice. The presence of activities of dual practice has been experienced in both developed countries such as United Kingdom (UK), China, and Peru as well as in emerging economies such as Zambia in Africa (Moghiri, Mohammad, Rashidian, & Sari, 2016). A previous study in Indonesia established that close to 50% of public doctors are involved in private practice while 80% of government medical doctors in Bangladesh also engage in private practice (Alpaslan, Lim, & Song, 2019).

Similarly, a study by Russo, McPake, Fronteira, and Ferrinho (2013) indicated that close to 55% of doctors in most African countries are engaged in dual practice. Montes-Rojas and Pal (2016) argue that the presence of weak regulations and increasing opportunities for dual practices for public health doctors can challenge the well-functioning of the public health sector, especially when health workers lack different forms of motivation. It is also estimated that the role of the private health sector has grown, making a significant contribution of close to 70% on health service delivery (Ashmore & Gilson, 2015).

Accordingly, the role of private health facilities complements the role of the public health sector in emerging economies (Moghiri, Mohammad, Rashidian, & Sari, 2016). For most countries, the expansion of private health sector functions to complement public health service provision has been desirable as it represents a gain in efficiency towards enhancing health services to the people. Moghiri et al., (2016) also indicated that dual practice may improve doctors' level of professionalism or skills.

However, for others, private health practice may create inefficiency, increase the gap of health accessibility, and create avenues for public health doctors to offer best practice in private facilities at the expense of public facilities, especially those engaged in dual practice (Alpaslan, Lim, & Song, 2019). A study by Sousa, Scheffler, Nyoni and Boerma (2013) revealed that engagement in dual practice results in reduced access to health services, fairness, and quality in public hospitals. The dual practice of public hospital medical doctors is believed to have direct implications on the successful delivery of health services in the public health sector (Rispel, Blaauw, Chirwa, & de Wet, 2014).

Subsequently, a previous study on factors affecting the dual practice of public hospital medical doctors established that senior or older doctors with a high level of experience may engage in dual practice more than their counterparts who are juniors and less experienced (Moghiri, Mohammad, Rashidian, & Sari, 2016). Additionally, Russo et al., (2018) provided personal factors influencing the dual practice of public hospital medical doctors like the need for an increase in overall earning, family demands, the flexibility of part-time jobs, opportunity for learning new skills, need for diversity, and stimulating working environment.

At the institutional level, factors such as growing demand in the private sector and adequate structures and resources are important (Russo, McPake, Fronteira, & Ferrinho, 2013). Nevertheless, other reasons such as faster promotion, provision of housing benefits as well as maintaining secured jobs may determine the level of commitment of medical doctors to public practice (Forsberg, Montagu, & Sundewall, 2011). Notwithstanding the magnitude of dual practice, public health facilities in Kenya continue to face severe challenges in enhancing health service delivery.

Critical challenges of the dual practice of medical doctors may span from misuse of public hospital resources, low-quality care, and longer waiting time for patients (Johannessen & Hagen, 2014). Other challenges include under-treatment of patients as well as referral of patients to private health facilities by public medical doctors (Forsberg, Montagu, & Sundewall, 2011; Montes-Rojas & Pal, 2016).

The purpose of this study, therefore, was to assess the dual practice of public hospital medical doctors in five aspects; (i) to identify prevalence or extent of dual practice, (ii) to establish forms or modes of dual practice, (iii) to establish an understanding of reasons that drive public medical doctors into dual practice, (iv) to establish reasons for commitments to public practice and the conditions for giving up a private practice for dual practice, and (v) to briefly find out the consequences of dual practice. The findings of this study are significant for policy developments regarding the dual practice of public hospital medical doctors in Kenya.

1.2.2 Public Health Sector

The Health system in Kenya can be classified into three distinct categories; public providers, private providers and non-profit organizations (including faith-based and mission hospitals as well as local and international NGOs), and private for-profit health care providers. Primary or basic government-funded public healthcare is provided at primary healthcare facilities and dispensaries. The devolution of healthcare services in Kenya has resulted in further classification of health facilities based on different functions or levels. That is national referral hospitals and county referral hospitals among others (Njuguna, Mwangi, & Kamau, 2014). This study focuses on county referral hospitals, especially in Nairobi County.

Also important to note is that while functions or activities of public health facilities are almost 80% financed by the government and donors, only 20% of the patient population has access to these services. Over 60% of patients lack access to quality health services while an additional 20% of the patient population seek quality health services in private hospitals (Kenya Health Workforce Report, 2019). Quite shocking is that the people who provide efficient and quality health services in the private health sectors are the same doctors in public health facilities. More recently, there has been an uproar on the increased level of corruption, increased cost of health care services, and provision of poor quality services in public hospitals. Little studies exist to try and link the dual practice of public hospital medical doctors to these challenges in public practice and how they affect the delivery of health services in public health hospitals.

Within Nairobi County, Mbagathi hospital and Pumwani Maternity Hospital remain the destination hospitals for many poor Kenyans at the country level. Another hospital that forms part of the study is Mama Lucy Kibaki Hospital, also within Nairobi County. The choice of these three hospitals was due to their nature of services and the fact that they remain accessible to the majority of poor Kenyans. Also, they form the only referral hospitals under Nairobi County Government. However, over the last few years, the level of quality of health services in these hospitals has been deteriorating significantly (Njuguna, Mwangi, & Kamau, 2014), a sign that there could be a problem that needs to be addressed. Some of the issues in these hospitals have been corruption cases, increased length of waiting time for patients (Ashmore & Gilson, 2015), the disappearance of patients, especially babies, and absenteeism of doctors among others. This study attempts to understand and assess the dual practice of public hospital medical doctors at a time when there are such challenges across various hospitals.

1.3 Statement of the Problem

The public health sector remains one of the accessible health facilities for majorities of the population globally. Ideally, regulation of dual practice in many countries is aimed at ensuring that the growing patient populations is not only attended to but also has access to quality, affordable, and equitable health services (Alpaslan, Lim, & Song, 2019). Besides, private practice has been deemed necessary to complement public practice in public health facilities (Bayat, et al., 2018). In Kenya, the health sector is currently under transformational changes. The need for quality, accessible, and

affordable health services for all has resulted in the ongoing implementation of UHC (WHO, 2015; Kenya Health Workforce Report, 2019). Dual practice in some countries is perceived to be an efficient way to deliver quality health services to citizens.

Whilst devolution in Kenya was expected to solve some of the problems that have existed for so many years such as in the health sector, public hospitals have continued to experience major challenges spanning from dual practice. The dual practice of public hospital medical doctors has not only affected the health service delivery in the public health facilities but has also resulted in numerous challenges. Such challenges may include over-treating of the patients, longer waiting time for treatment, and referral of patients from public to private facilities (Forsberg, Montagu, & Sundewall, 2011; Johannessen & Hagen, 2014). Considerably, other studies have shown that the growing dual practice of public hospital medical doctors not only causes misuse of public hospital resources but also causes inefficiency in the public hospitals. For instance, where public medical doctors observe a high level of best health practices in private hospitals at the expense of public hospitals (Sousa, Scheffler, Nyoni, & Boerma, 2013; Alpaslan, Lim, & Song, 2019).

Therefore, the magnitude of the dual practice of public hospital medical doctors in public hospitals is an area of interest for both scholars and health practitioners, especially with devolution and ongoing transformational changes in the health sector in Kenya. Inability to address these concerns resulting from the dual practice of public hospital medical doctors would mean that the level of health service delivery in public hospitals remains affected. Hence, the need to address the dual practice of public hospital doctors and see how best practice through dual practice can be achieved and implemented based on the existing policies and dual practice policies from other countries. Therefore, in response to the challenges as highlighted, this study assessed the dual practice of public hospital medical doctors.

1.4 Research Objectives

The main objective of this study was to assess the dual practice of public hospital medical doctors at county referral hospitals in Nairobi, Kenya.

1.4.1 Specific Objectives

i) To establish the prevalence or extent of the dual practice of public hospital medical doctors at county referral hospitals in Nairobi, Kenya.

ii) To determine forms or modes of dual practice of public hospital medical doctors at county referral hospitals in Nairobi Kenya.

iii) To identify factors that drive the dual practice of public hospital medical doctors at county referral hospitals in Nairobi, Kenya.

iv) To find out reasons for commitment to public hospitals among public hospital medical doctors at county referral hospitals in Nairobi, Kenya.

v) To examine consequences or impacts of dual practice of public hospital medical doctors at county referral hospitals in Nairobi Kenya.

1.5 Research Questions

i) What is the prevalence or extent of the dual practice of public hospital medical doctors at county referral hospitals in Nairobi, Kenya?

ii) What are the forms or modes of dual practice of public hospital medical doctors at county referral hospitals in Nairobi, Kenya?

iii) What are the factors that drive the dual practice of public hospital medical doctors at county referral hospitals in Nairobi, Kenya?

iv) What are the reasons for commitment to public hospitals among public hospital medical doctors at county referral hospitals in Nairobi, Kenya?

v) What are the consequences or impacts of dual practice of public hospital medical doctors at county referral hospitals in Nairobi, Kenya?

1.6 Scope of the Study

While the immediate effect of dual practice of public hospital medical doctors have been well documented internationally and locally, the call for improved health care services and the need for implementation of UHC is an important opportunity to further research around dual practice of public hospital medical doctors. Particularly, this study focused on the dual practice of public hospital medical doctors at county referral hospitals in Nairobi Kenya. The scope of the study was limited to recruiting 63 participants from the three hospitals; Pumwani Hospital, Mbagathi Hospital, and Mama Lucy Hospital. This study took a period of 1 year; from January 2019 to January 2020. Importantly, only doctors and a few selected management teams were included in this research. Thus, doctors from other hospitals were not included in the study. Data was collected using online (web-based) questionnaire survey link..

1.7 Significance of the Study

Kenya is among the fastest-growing countries in Africa with adequate public health financing from the government (Kenya Health Workforce Report, 2019). The 2010 Constitution clearly demands that every individual in the country have access to quality, affordable, and equitable health services. However, with devolution and the need to implement UHC, public health facilities have continued to experience challenges such as dual practice by public hospitals medical doctors. Therefore, the time has come to describe the dual practice of public hospital medical doctors and formulate a change in policy-based practice aimed at governing the dual practice of public hospital medical doctors.

Again, there are disparities in healthcare service delivery in public and private hospitals. A critical empirical review clearly illustrates that with the dual practice of public hospital medical doctors comes the inefficiency of health services delivery in public hospitals. As a result, public hospital medical doctors apply the best health service practices in private hospitals at the expense of public hospitals. Considering these challenges, there is a strong need to have a well-functioning public health system with clear public health policies to provide guidelines and measures of dual practice for public hospital medical doctors.

Considering the aspect that over 60% of the Kenyan population seeks medical services in public health hospitals (Kenya Health Policy Forum, 2014), there is a need for stakeholders and health practitioners to address issues or reasons that drive medical doctors in public hospitals to engage in the dual practice. This study, therefore, aims to highlight these reasons to assist management, government, and healthcare practitioners in addressing the issues effectively and to ensure that the dual practice of public hospital medical doctors does not cause inefficiency in health services delivery in public hospitals in Kenya.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter aims to identify and discuss some of the existing scholarly articles or journals related to the current study on the dual practice of public hospital medical doctors. The chapter began by providing a detailed theoretical review of the study. A critical empirical review is then carried out to indicate the methodologies and findings of the previous studies. The chapter then provides a knowledge gap of the study based on the empirical literature review of the study. It concludes by discussing the proposed conceptual framework of the study.

2.2 Theoretical Review

This study relies on the dual-job holding and job mobility model as well as stewardship theory to assess the context and concept of the study as discussed below.

2.2.1 Dual-Job Holding

Paxson and Sicherman (1996) conducted an empirical study titled "the dynamics of dual job holding and job mobility" and developed a model of job mobility and dual-job holding. In this model, two ideas are brought forward. First, the model argues that hours adjustments cannot be made within jobs, however, hours vary from job to job. That is to say, hours constraints may be prevalent – if individuals find hours adjustments within jobs impossible, then they must change jobs if they want to work for more hours or fewer hours. Second, desired working time may vary depending on other factors like health status including marital, number of dependants, and the value of financial wealth.

Paxson and Sicherman proceeded and analyzed how stochastic preferences including inflexible hours within jobs and mobility costs, impact job mobility decisions when holding two jobs is not an option. According to the model, inflexible hours within the job and costs linked to looking for a second job implies that desired hours and actual hours within a job may at given periods diverge. Keeping wages constant, the model

implies that individuals will change new jobs only if the expected benefit in welfare as a result of having increased desirable hours outweighs the fixed cost of mobility.

However, with the possibility that individuals can utilize additional jobs to alleviate hours constraints, the model assumes that individuals, in this case, public medical doctors, can always find, at no cost, an additional low-paying job at any hour level. The thought of seeking an additional job on top of the primary one alters the analysis of job mobility. According to the authors, individuals who are not happy with their working hours considers additional job (dual-job holding) and job mobility as a better way of adjusting hours. The implication is that the availability of secondary jobs should reduce mobility and, more so, secondary jobs can be utilized to increase but not reduce hours (Paxson & Sicherman, 1996).

In a similar study on the inter-related dynamics of dual job holding, human capital, and occupational choice, Panos, Pouliakas, and Zangelidis (2009) also developed a dual-job holding and job mobility. According to the authors, the choice of the main and second jobs is likely to prominently impact individuals' career development through an accumulation of transferable human capital, knowledge, and occupation-specific skills that the career entails. From their analysis, Panos et al., (2009) present that moonlighters and non-dual practitioners are more likely to enter self-employment compared to staying in the same salary job. Therefore, multiple job holding itself is what affects job mobility rather than the occupational choices that a person makes in their second job. This model, therefore, may be significant in explaining how people make their decisions and under certain circumstances, especially, in the health care sector. That is to say, public medical doctors can always find second low-paying jobs at any level of hours and at no cost. The model is also significant to the study as it highlights reasons or factors that would make an individual seek a second-paying job on top of his or her first job.

2.2.2 Stewardship Theory

In the health sector, for instance, stewardship as a theory provides the basis to solve dilemmas and reconfigure the role of the state, organization, or its agents to improve the health system. This is because, it is believed that changes in state or institutional behavior can assist to produce better health-related outcomes (Travis, Egger, Davies,

& Mechbal, 2002). Stewardship, therefore, is a form of governance associated with agency theory which is connected to the administrators' willingness and ability to earn public trust by being an effective and ethical agent in undertaking the state or the organization's objectives. As such, trust, ethical behavior, and good decision-making are part of stewardship (Kass, 1990; Saltman & Ferroussier-Davis, 2000).

From the managerial perspective, Armstrong perceives stewardship as the willingness to be more accountable for the well-being of the organization by working in a service rather than in control of those around us (Armstrong, 1994). The author proceeds to add that stewardship exhibits the capacity to combine efficient, marker-like behavior with trust-based and ethical forms of decision making which are the calling of public servants, for instance, public medical doctors. In a study on the concept of stewardship in health policy, Saltman and Ferroussier-Davis (2000) argued that the good dimensions of stewardship as an agency theory are importantly tied to its potential to improve policy outcomes.

The main contention is that while concentrating the policy process on traditional principal-agent relationships can make an efficient state, it is also possible to design a condition that is not only efficient but also good and emphasizes normative and ethically oriented expectations of stewardships (Kapoor, Kumar, & Thakur, 2014). Accordingly, stewardship also provides the prospect of building a sense of social purpose among employees, especially those working in the public sector like health care. For example, in the case of this study, stewardship is significant in assisting the public medical doctors to restore a sense of trust and legitimacy to the need to have equitable and accessible health services (Saltman & Ferroussier-Davis, 2000).

Regarding social and personal motivation that those who work in health systems face, available reports suggest that social motivation is about the desire to serve the common good and is usually assumed to be positive. On the other hand, personal motivation is about the desire to improve an individual's well-being and is assumed to be negative. Thus, in the health system, public medical dual practitioners are perceived to prefer personal motivations, thus, viewed as negative to the well-functioning of the public health sector or system. Stewardship, therefore, becomes important when it comes to dual practices (Nachuk & Kundra, 2009).

Connecting the theory to the concept of the current study, stewardship in the health sector calls for the ability to formulate policies that propose good regulation of behaviors of public hospital medical doctors. That public hospital medical doctors need to develop effective ethical behaviors and trust that are grounded on social motivation – which is the desire to serve the common good and ensure access to health services. Also, stewardship informs the study as it emphasizes the reasons for commitment to public practice and private practice.

2.3 Empirical Literature Review

This section of the chapter of the study discusses existing scholarly reviews of the dual practice of public hospital medical doctors. The empirical review of the study was based on reasons associated with dual practice engagement, understanding of reasons for commitment to public practice, and consequences of public hospital medical doctors' dual practice.

2.3.1 Factors/Reasons for Dual Practice Engagement

Literature on the dual practice of public hospital medical doctors is rather diverse covering the economics of dual practice, governance of public health service delivery, motivational aspects, and consequences of dual practice in emerging economies. A cross-sectional study of 13 public hospitals on factors influencing the perception of medical staff and outpatients of dual practice in Shanghai China, established that the perception of medical staff who engages in dual practice is affected by demographic characteristics. That is, medical staff in the surgical department held a positive perception or belief of dual practice and are more willing to participate in dual practice. 63% of the medical staff supported dual practice. Human resource management and publicity of dual practices are important factors of dual practice (Chen, Li, Dai, Deng, & Zhang, 2016).

Bayat et al., (2018) conducted a qualitative study to find out factors affecting dual practices in medical specialists in Iran using the purposive and outlier sampling method, and semi-structured deep interviews with 14 key informants. The findings revealed six major themes which include financial incentives, cultural attitudes about the professional identity of doctors, experience and academic level of doctors,

regulation in the public sector, available resources, and characteristics of health service locations. These factors, thus, in the long run, may affect differences in health services provision in public and private health sectors and the wiliness of medical officers to engage in dual practices (Bayat, et al., 2018).

Also, Socha (2010) reviewed dual practices and their effect on public health care in Denmark. The findings provided mixed findings, where some effects depended on many assumptions such as intention to maximize profit by the physicians. The study called for the need to enforce cost restrictions on dual practices to improve the behavior and performance of health officers. The movement of skilled doctors from the public to the private sector is a key constraint to achieving UHC and is currently affecting health systems globally.

In a systematic literature review study on factors influencing doctors' choice of workplace-based on drivers of attrition and policy interventions using nineteen articles which met the criteria, findings reveal that factors influencing doctors' workplace may be country or institutions specific but include; financial incentives, career development, infrastructure and staffing, professional work environment, workload and autonomy (El Koussa, Atun, Bowser, & Kruk, 2016). Results also indicated that financial incentives act as a motivator in retaining doctors in the public sector.

Bayati, Rahidian, Zandian, and Alipoori (2019) investigated the rate and factors affecting the dual practice of general practitioners as the most important primary care providers in Iran. The study adopted a cross-sectional design with data drawn from 666 Iranian general practitioners, based on the national survey. Multinomial logistic regression was used to examine the factors affecting concurrent employment in both public and private sectors and the factors affecting employment in more than one place (either public or private). The study established that the most important and significant factor affecting general practitioner's dual practice in Iran was their financial expectations. Therefore, there is a need for effective policies to intervene doctors' income expectations and adoption of reforms like improving tariffs setting in health systems.

Muruga (2019) conducted desk review research to develop a management model that can measure and evaluate physicians' dual practice in the Kenyan health sector. Basing its findings from previous studies, the author established that there exist numerous factors or reasons that are important in influencing physicians to engage in the dual practice. These factors comprise infrastructure, working environment, promotion practices, and income level. Another important factor as per the study findings was the cost/benefit of dual practice. However, findings also revealed that there is a significant moderating influence of legal framework on physician's dual practice.

2.3.2 Reasons for Commitment to Public Practice

Several reasons may either drive medical doctors into dual practice or not to practice dual practice. A hospital-based survey study of 483 physicians in Vietnam found out that job-holding officers were most likely to be senior officers in the public health offices, where the majority have private wing offices in the same health facilities. The study reported that if certain conditions were met such as increased salary and other benefits, dual job-holders were willing to drop their private practice and concentrate on improving health service delivery in the public health facilities (Do & Do, 2018).

Berman and Cuizon (2004) as cited by Moghiri, et al., (2016) argue public hospital medical doctors' private practice enhances the technical knowledge and skills of government providers, boosts public service quality. Moreover, dual practitioners have incentives to their best and give quality services in their public job to get a good reputation and advertise for their private practices. However, a literature review was undertaken by Moghiri, et al., (2016) on the implications of dual practices on health workers provided mixed findings; both negative and positive consequences.

Russo et al., (2018) conducted a scoping review of the literature to investigate the nature and consequences of nurses' dual practice using Arksey and O'Malley's methodological steps which include identification of relevant studies. Of the 65% peer-reviewed journals, it was established that 50% of dual practice is common in Australia, Canada, and the UK, with 28% in South Africa. Drivers of dual practice among nurses are the opportunity to increase meager salary, dissatisfaction with the main job in public health facilities, the flexibility offered by holding more jobs (Russo, Fronteira, Jesus, & Buchan, 2018). However, the study failed to link the consequences of dual

practices to health service delivery in public hospitals. Additionally, Socha (2010) in a systematic literature review on impacts of physician dual practices on the provision of health care in public facilities provided negative and positive results, making the need for more studies as the current study seeks to find out.

Relman (2008) on the medical professionalism in the commercialized health care market, noted that the science and technology of the health system is changing. The endangered aspect of health care professionals is the ethical foundations of medicine, which includes the commitment of physicians to put the needs of patients ahead of personal gain, to deal with patients honestly, competently, and compassionately, and to eliminate conflict of interest that could undermine public trust (Relman, 2008). In areas where medical officers have viewed the medical practice as a business, issues of professionalism have been reported. To some scholars, high competition in the private health sector has boosted the technical knowledge of physicians, which can be applied in public health facilities, how to others, it has resulted in the diminishing of trust and commitments in the public health sector, hence poor health services deliveries.

In a cross-sectional study involving Finnish Health professionals, Heponiemi, Kuusio, Shinervo, and Elovainio (2011) examined whether there are differences in job-related attitudes and well-being among physicians working in private and public health facilities. The study used primary data involving a random sample of 1522 women and 1047 men aged 25 – 65 years. Findings established that working in private health facilities provides physicians with a high sense of job satisfaction and organizational commitment as well as lower psychological distress compared to public health facilities. Thus, individuals involved in private practice feel better than those in public practice due to the fairness and organizational justice that private health facilities provide. However, the study did not primarily focus on the dual practice of public hospital medical doctors.

2.3.3 Consequences of Dual Practice

In a study to establish perspectives of physicians, patients, and managers on the consequences of public-on-private dual practice among physicians in public hospitals in Ethiopia, the results established that the positive consequence of dual practice from managers' and physicians' perspectives was physicians' retention in the public sector

(Abera, Alemayehu, & Herrin, 2017). However, the negative consequence was that close to 19.8% of the patients were diverted from a public hospital to a private hospital. The study used a cross-sectional design using mixed methods with a semi-structured, self-administered questionnaire distributed to physicians, and a structured questionnaire distributed to patients. The analysis involved the use of quantitative and qualitative techniques.

In a recent study on dual practice and inequities in access to healthcare (Kumar, 2018), the dual practice of doctors may enable healthcare users or patients to see the same doctor in public and private health facilities. Whereas these represent benefits to the healthcare users, access to such benefits may differ markedly by social status or location. This represents inequities in access to healthcare where individuals who are better off in society can access better health care services in the private sector from the same doctors who may give substandard health care services in the public sector. There is, therefore, the need for stakeholders to pay attention to the growing demand for the dual practice among physicians and develop effective frameworks that promote health equity in both public and private health sectors (Kumar, 2018). The study was undertaken in Sri Lanka using 5 focus group discussions and 22 individual interviews. Data was collected using a questionnaire and analysis conducted through thematic analysis.

A previous study on the implications of banning or not banning the dual practice in public health facilities produced mixed results (Alaref, et al., 2017). Using theoretical evidence, together with context-specific primary and secondary data, the authors established that while dual practice is negatively associated with referral of patients from public to private health facility as well as brain drain, poor quality in public health facilities linked to shortages in supplies and equipment, poor organizational and management practices, low motivation, lack of monitoring, and accountability frameworks are unlikely to change just by banning the dual practice of public hospital medical doctors.

A review of other studies on the dual practice of public hospital medical doctors suggested that there are many negative effects on the health system such as increased access barriers for patients, de-legitimization of health services in public health facilities, reduction in trust between patient and doctors, reduced degree of health care

provision, and increased transfer of doctors from public health facilities to private health facilities (Rispel & Blaauw, 2015). In a cluster random sample study of 80 hospitals in South African provinces using a questionnaire, the results established that negative consequences of dual practice are serious (Rispel & Blaauw, 2015). Therefore, there is a need for a combination of strong nursing leadership, effective management, and consultation with dual practitioners to develop effective frameworks for minimizing the serious negative effects of moonlighting or dual practice.

Recently, Kaabi, Varughese, and John (2019) presented a review article on whether dual practice on health service should be promoted in Qatar? According to the authors, dual practice is a widespread phenomenon of public healthcare workers working concurrently both within and outside the public facilities for personal gains. More importantly, the authors argue that there are positive impacts of dual practice like reduced budgetary strains of the public sector, the negative impacts are erroneous and include an increase in detrimental and predatory behavior, ethical issues, and migration of physicians to the private sectors. All these challenges ultimately result in poor governance as a result of a lack of stewardship.

2.4 Knowledge Gap

Globally, as countries strive to achieve UHC, there is a need for additional skilled health professionals by 2035; both doctors, nurses, and midwives. Skilled health professionals are needed to enhance, maintain and accelerate gains on UHC by ensuring effective coverage for a growing set of health care needs for all populations (El Koussa, Atun, Bowser, & Kruk, 2016). Acute to this program is the shortage of human resources in emerging economies which has significantly resulted in dual practices by public hospital medical doctors in an attempt to reduce the doctor-patient ratio gap.

The pervasive practice of dual practice and the shift of medical doctors from public hospitals to private hospitals suggests a need to assess its extent, factors associated with it, and understanding of reasons that drives doctors into dual practice (El Koussa, Atun, Bowser, & Kruk, 2016; Kimathi, 2017). Concerning Kenya's context, especially county referral hospitals, it is in the researcher's knowledge that more studies are needed to develop understanding and knowledge of the dual practice of public hospital

medical doctors. A critical review of the literature has established mixed findings, where most of the studies have been done at the international or regional level, with little emphasis on the dual practice of public hospitals medical doctors at county referral hospitals in Kenya. This study, therefore, aims to fill this gap.

2.5 Conceptual Framework

The conceptual framework provided in Figure 2.1 aims to acknowledge the multifaceted nature of dual practice in public hospitals in Kenya. Two theoretical approaches, which have previously been adopted in health-related studies, underpin the design of this conceptual framework: dual-job holding and job mobility and stewardship theory. Together with the literature synthesis, a framework was designed to assess dual practice broadly to expand the knowledge and understanding of the dual practice of public hospital medical doctors in Nairobi County referral hospitals.

The indicators for the identified variables differed significantly, however, were interconnected to explain the concept of the study. For instance, the prevalence was measured by dual practices versus non-dual practices. The indicators for forms and/modes of dual practice included dual practice inside public hospital only, dual practice outside the public hospital, and both dual practice inside and outside public hospital only among other forms. The measurement for these two variables i.e. prevalence and forms or modes were based on a scale of 1-2 where 1 was Yes and 2 was No. The aim was to determine the category where public hospital medical doctors belong so as to answer the research questions. Besides, motivating factor indicators included salary increase, condition of work, need for challenging work environment, demand for health services among others. Reasons for commitment to public practice indicators included upholding public responsibility of public health for all, build reputation, training, and research opportunities among others. The measurement for these variables i.e. factors and reasons for commitment were based on a ranking scale with multiple responses. The consequences of dual practice indicators vary and were based on the qualitative findings.

Independent Variable **Dependent Variables**

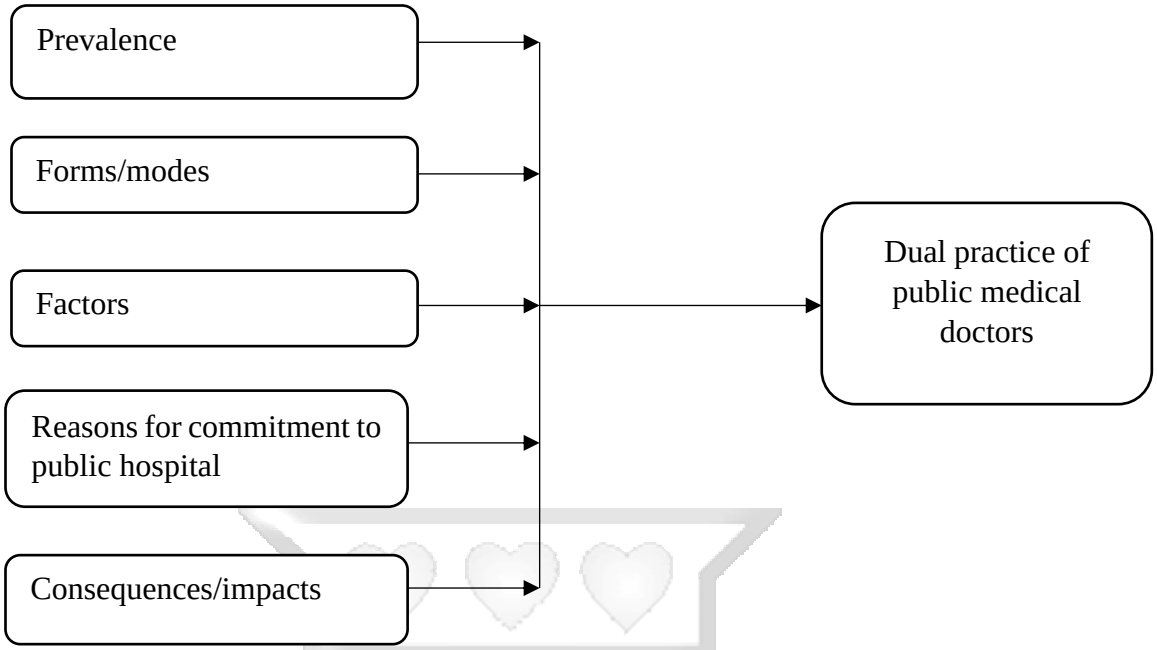

Figure 2.1 Conceptual Framework (Based on researcher's perspectives)

Source: Author (2020)

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter discusses the methodologies that the study used to answer the research questions. The chapter starts by describing the research philosophy and study design followed by a detailed population and sampling of the study. The chapter then describes the tools and processes of data collection, specifically, addressing how data was collected and using which tools. Additionally, the chapter provides a research quality of the study which entails validity and reliability of research instruments. The chapter concludes by highlighting how data was analyzed as well as describing research ethical considerations.

3.2 Research Philosophy

According to Creswell and Plano Clark (2011), research philosophy refers to a belief regarding how data about the study should be collected, analyzed, and interpreted to make study inferences. Various philosophies can be used in a study including positivism, interpretivism, and pragmatism. Because this study uses both qualitative and quantitative data (mixed-methods research), the study adopted pragmatism philosophy which is the most used for mixed-methods studies (Bergman, 2014). Creswell and Plano Clark further explained that pragmatism philosophy offers that features of both single and multiple realities exist (ontology), that information gathering is driven by "what works" to assess the research question (epistemology), and that researchers achieve this by merging and mixing qualitative and quantitative data (methodology).

3.3 Research Design

According to Kumar (2018), a research design describes the strategies or plans that the study uses to collect data, measure data, and analyze data. It provides steps that are followed during the research process. There exist various research designs that a study can adopt including exploratory design, descriptive design, longitudinal design, and case study design among others. Because of the complexities inherent to the research

questions as well as the dual practice in general, this study adopts a mixed-methods research study design (Charles & Fen, 2007).

This study proposes a mixed-method research design for triangulation. That is to say, to seek for convergence and correspondence from different health system players; complementarity which entails seeking for elaboration; and development which entails using the outcome from one method to inform another method (Charles & Fen, 2007). Generally, mixed-method designs assist the researcher to combine various research designs that complement each other to develop adequate research outcomes (Sekaran & Bougie, 2016).

First, this study adopts an exploratory design which involves a qualitative phase of data collection and analysis before proceeding to the quantitative phase. The exploratory design suits this study since dual practice remains an area of interest for many scholars and that there still exist calls for more studies to identify emerging insights from different players in Kenya's public hospitals (Creswell & Creswell, 2017). A quantitative descriptive design was then adopted to provide a clear understanding of the knowledge of the dual practice of public hospital medical doctors.

3.4 Population and Sampling

3.4.1 Target Population

Target population refers to entire individuals, objects, or subjects that the study is interesting in to make study conclusions (Sekaran & Bougie, 2016). The target population for this study was public medical doctors and management teams working at county referral hospitals in Nairobi, Kenya. First and foremost, there are three (3) county referral hospitals in Nairobi. Each hospital has a register of all medical doctors. From the hospitals' records, the list of registered public medical doctors was obtained. As for the management, the study targeted either middle management or senior management from various departments to participate in study. From both the hospitals' records, there are over four (4) departments in each hospital. Individuals were randomly picked from these departments to participate in the study. The target population of the study, therefore, was 63 participants.

The choice for including public hospital medical doctors and management was that medical doctors are generally assumed to be involved in multiple job holdings. However, the extent and reasons that drive them to dual practice remain scanty. Having public hospital medical doctors as the target population, therefore, ensures that the study gains insightful information for answering the research questions. Additionally, management was critical since they are in charge of the welfare of the public hospital medical doctors. As a result, their views and responses may help in answering reasons and ways that hospitals can adopt to ensure that public medical doctors remain fully committed to their various public practice.

Table 3.1 Target Population

Hospital	Category	Target Population
Pumwani Hospital	Medical doctors	13
	Management	8
	Total	21
Mbagathi Hospital	Medical doctors	16
	Management	10
	Total	26
Mama Lucy Kibaki Hospital	Medical doctors	9
	Management	7
	Total	16
	Total	63

Source: Author (2020); Hospital records (2020)

The inclusion criteria are that the study involves all the medical doctors posted in these three (3) county referral hospitals by the government. For the management, the study sought to involve a few middle or senior managers since they were picked based on the judgment of the researcher. For exclusion criteria, the study did not involve nurses or other forms of health officers except medical doctors. Also, recent graduate junior medical officers or from various health schools posted in these facilities did not participate in the study.

3.4.2 Sampling Technique and Sample Size

Sampling is the process by which a few individuals are selected from the target population to be examined in the study. These few individuals form the sample of the study. Ideally, a good sample should possess similar attributes to the target population. The goal of study sampling is to facilitate a faster research process – data collection and analysis (Etikan & Bala, 2017). Therefore, a sample with the population's attributes can easily allow the generalization of study findings. There are various sampling techniques including probability and non-probability sampling techniques. Types of probability sampling techniques include systematic, stratified, cluster, and multi-stage among others. Non-probability sampling techniques include quota, snowballing, and purposive among others (Miller, Johnston, Dunn, Fry, & Degenhardt, 2010).

The sample size is the actual number of the few individuals picked from the target population to be involved in the study (Kombo, & Tromp, 2011). Because the target population of this study was not too large, all the participants formed the sample size (63) for the study using the census sampling method. The Census sampling method proposes that all population participants be included and analyzed as a study sample. As such, census is a method that aims to gather information about every person or object of the population (Ethridge, 2004). The sample size of the study, therefore, was 63 participants.

3.5 Data Collection Techniques

To establish a holistic understanding of the research phenomenon, this study collected data from various sources using quantitative and qualitative techniques. The study adopts mixed methods sources of information (information triangulation) to enhance the internal validity of the study. The main research tool for the study was a questionnaire. The questionnaire tool was designed to contain both semi-structured and open-ended questions. The questions comprised of background questions, dichotomous questions, multi-choice questions, and ranking scale questions. The advantage of using semi-structured and open-ended questions is that they gather quantitative and qualitative data respectively. This creates complementary in

providing accurate and reliable information aimed at solving the research problem (Newing, 2011).

Open-ended questions were used to explore perceptions and consequences or issues related to dual practice from the participants' understanding and knowledge. This information was qualitative in nature. Additionally, a quantitative survey with predetermined semi-structured questions was conducted. A ranking scale was designed to gather quantitative data. However, there were instances where both tools were used interchangeably on the objectives of the study. This was to ensure that analysis was easy and conclusions are done based on the information that was gathered from the respondents.

3.6 Data Collection Procedure

Primarily, the study aimed to use a drop-pick approach to the data collection procedure. First, the researcher recruited a research assistant to help with the data collection process. The researcher then sought approval from various hospitals on data collection. Once the approval from each hospital was received, the researcher approached the participants and explained the concept and purpose of the study, and politely asked them to participate in the study. However, this data collection procedure dramatically changed when the coronavirus pandemic, also known as COVID-19 was first reported in Kenya leading to the lockdown of the country. The study, therefore, identified a self-administered online questionnaire survey method as the most appropriate strategy to reach out to the medical doctors and management of these three hospitals.

Because of the increased role of medical doctors in the fight against COVID-19, the researcher first reached out to the top management and requested contacts and other essential personal information like emails of a few participants. An online questionnaire survey link with semi-structured and open-ended questions was then developed using *Google Docs* and shared with the few participants that the researcher managed to get their personal information. The study then used a snowballing approach where one participant shared the link with his or her colleague(s) or friend(s) in the county referral hospitals in Nairobi.

While this approach may have proved challenging at the start, respondents were given enough time to respond taking into consideration the challenges of the pandemic on health workers across the world. The process of data collection, however, continued until the target response rate set by the researcher was achieved. In instances where the researcher perceived a lack of or slow online feedback, the researcher reminded the participants to kindly participate in the study by filling the survey link. Questionnaires were designed in a very simple and accurate language that was appealing to the respondents.

3.7 Research Quality

Once the study outlines measurements and constructs of research instruments in specific questions under research objectives, the study proceeded to validate the instrument (questionnaire) and its measurements. To achieve this, the study ensured that measurements were accurate, precise, and stable; validity and reliability concepts were addressed (Creswell & Creswell, 2017). Similarly, a pilot study was conducted on 10% of the sampled population, averaging about 10 participants. The researcher used medical doctors and management from other hospitals which were not part of county referral hospitals in Nairobi to participate in the pilot study. A purposive technique was used. The response gathered from the pilot study was used to enhance the accuracy and consistency of the measurement constructs.

3.7.1 Reliability of Research Instrument

Thereafter, the study established the reliability of the instrument. Reliability is the extent to which the designed data collection tool is consistent in giving the same findings when used severally in the study or other studies similar to the current study. Reliability can be test-retest reliability, internal consistency, and inter-rater reliability (Creswell & Plano Clark, 2011). However, for this study, test-retest reliability was used.

Since the study uses a mixed-method approach, pilot or member-checking procedures to sought objective opinions as to how questions were designed effectively (Kombo, & Tromp, 2011), easier for respondents to understand, avoid biases or leading questions, and to avoid any other potential ambiguity was employed (Kothari, 2012).

The aim here was to ensure that the questionnaire questions were consistent and aligned to the objectives of the study.

3.7.2 Validity of Research Instrument

Kumar (2011) defines validity as the extent to which the designed questions or contents of the questionnaire tool describes the accuracy of the instrument. The objective of undertaking validity was to ensure that questions are designed correctly in measuring the research objectives. Validity can be through face validity, content validity, and criterion validity. For this study, however, content validity was adopted.

It involved seeking the opinion or judgment of the expert to improve the contents of the designed questionnaire tool (Creswell & Plano Clark, 2011). Once the questionnaire tool was designed, the researcher shared it with the supervisor and the panelists. The opinion received from the supervisor and that of panelists during the defense of the proposal was used to improve the accuracy of the questionnaire tool.

3.7 Data Analysis and Presentation

This study undertook a quantitative survey alongside qualitative information. And so, quantifying and non-quantifying techniques of data analyses were used (mixed-methods analysis) (Guest, 2013). Non-quantifying analysis methods were for qualitative data from open-ended questions, for instance, the use of content analysis and other general qualitative analytical techniques like information reduction and depiction of participants' information to make meaningful conclusions. Another advantage of adopting qualitative analysis was that it assists the researcher to convert raw information into meaningful understanding and reporting.

Moreover, the content analysis aimed to analyze medical doctors' opinions or attitudes towards the dual practice. The content analysis was conducted using the thematic and narrative text approach, manually. The researcher went through the questionnaires one by one taking into account the qualitative response of the respondents and classifying them for easy analysis. The advantage of using qualitative and content analysis as part of the multi-method analysis in this study was that they emphasize sense-making and provided an understanding of the situation of the study, rather than predicting or just explaining (Schilling, 2006; Miles & Huberman, 1984).

The objective was to develop a fuller interpretation of the public hospital medical doctors' dual practice concept based on the respondents' experiences to provide a holistic view of dual practice in Kenya. Additionally, the study undertook quantitative analysis like descriptive where frequency and percentages were used to present the findings of the study. The descriptive analysis aimed to simplify the information in a sensible way for providing additional knowledge and understanding of public hospital medical doctors' dual practice.

3.8 Ethical Considerations

Before proceeding to the actual field of study, the researcher applied for the ethical research letter from the Strathmore University Ethics and Review Committee. This letter was issued upon drafting the consent form and research dissemination plan. For the consent form, the researcher vividly explained the purpose of the study to the respondents and categorically stated the benefits and risks involved in the study. Also, the consent form politely asked the respondents to participate in the study and that every participant has a choice to participate or not to participate in the study, and that any participant was free to withdraw his or her consent at any stage of the study.

In summary, the consent form indicated the researcher's name and contact that respondents can use for further questions, the purpose of the study, confidentiality, and anonymity of the participants, as well as voluntary participation. Once the researcher received the ethical researcher letter from the university, the next stage was to apply for the National Commission for Science, Technology, and Innovation (NACOSTI) research permit and ethical letter. The NACOSTI letter, university letter, and the consent form were then attached to the questionnaire survey for participants to read and understand. However, since the study was an online survey, the researcher provided a detailed explanation of the study with a brief consent form and informed the participants that the study has been approved by the University and NACOSTI research bodies.

CHAPTER FOUR

DATA ANALYSIS AND PRESENTATION OF THE FINDINGS

4.1 Introduction

This chapter of the study discusses the analysis and presentations of the research findings as systematically described in the research methodology. The study assessed the dual practice (DP) of public hospital medical doctors at County Referral Hospitals in Nairobi County utilizing both quantitative and qualitative approaches. For quantitative data, the study relied on Scientific Software, Statistical Package for Social Sciences for analysis. Descriptive information such as frequency and percentages were presented using tables. For qualitative data, the study adopted the use of sentimental and content analyses using narrative text, to develop an understanding of intuition and perception of the participants towards the research problem manually. In summary, this chapter covers the response rate, demographic information, and specific results of the research objectives.

4.2 Response Rate

The study adopted an online survey method as described in the methodology under the data collection procedure section. A total of 63 designed online questionnaire surveys were sent to the respondents through their contacts such as emails and other social group contacts. A total of 50 participants filled the online survey questionnaires and submitted their feedback - over the study period. This represented a response rate of 79.6% as shown in Table 4.1 of the study. Only 13 respondents failed to fill and submit the online questionnaire survey link – equivalent to 20.4% of the respondents who failed to participate in the study. Research scholars such as Mugenda and Mugenda (2013) explained that a response rate of 50% is adequate, 60% is good, and above 70% is excellent for analysis and presentation of the findings. Thus, the established response rate of 79.6% for this study is excellent for answering the research questions.

Table 4.1 of the study presents results on response rate and also by hospital distribution as well as respondents category. Three hospitals i.e. Pumwani hospital, Mbagathi hospital, and Mama Lucy hospital were included in the study with two categories of

respondents; medical doctors and management. As shown, the study established that the majority of the participants, 31 (62%), were medical doctors and 19 (38%) were management across the three hospitals included in the study. In terms of medical doctors' response distribution across the three hospitals, the study established that 10 (20%) of the medical doctors were from Pumwani hospital. 13 (26%) of the medical doctors were from Mbagathi hospital while 8 (16%) of the medical doctors were from Mama Lucy hospital. In terms of management response distribution across the three hospitals, results in Table 4.1 further indicate that 6 (12%) of the management respondents were from Pumwani hospital. Additionally, 8 (16%) of the management participants were from Mbagathi hospital whereas 5 (10%) of the management respondents were from Mama Lucy hospital. Therefore, the established excellent response rate is good to make study conclusions.

Table 4.1 Response Rate

Response category			Frequency	Percent
Responded			50	79.6%
Did not respond			13	20.4%
Total			63	100%
Response distribution by category/hospitals				
	Hospitals			
Respondents category	Pumwani	Mbagathi	Mama Lucy	Total
Medical doctors	10 (20%)	13 (26%)	8 (16%)	31 (62%)
Management	6 (12%)	8 (16%)	5 (10%)	19 (38%)
Total	16 (32%)	21 (42%)	13 (26%)	50 (100%)

4.3 Demographic Information

This section sought to describe the demographic information of the respondents of the study. Key information captured included gender, age, education level or profession, and professional experience. Table 4.2 summarizes the demographic information of the sample of the study. Findings established that regarding the gender of the respondents, 22 (71%) of the medical doctors were male while 9 (29%) were female medical doctors. Additionally, the study established that 11 (58%) of the management who took part in the study were male while 8 (42%) of the management were female. About the age of the medical doctors and management participants combined, the

study reported an average age of 38.2 years with a standard deviation (±4.2). Regarding the education level of the study participants, the outcome shows that 19 (61%) of medical doctors have undergraduate/MBChB/MD level of education while 12 (39%) of medical doctors have graduate/MMed level of education.

Subsequently, 14 (74%) of the management has an undergraduate level of education whereas 5 (26%) of the management included in the study has a graduate level of education. Lastly, the study findings in Table 4.2 indicated that on average, both medical doctors and management participants have 6.2 years of professional experience with a standard deviation (±4.1). The implication of demographic information is essential to this study as it demonstrates the participants' level of understanding of the concept of the study in regards to their education and professional experience. Age is also an important factor as it provides the researcher and the readers to understand the type of participants included in the study – young versus old or both.

Table 4.2 Demographic Information Summary Results

Characteristics		Category	Outcome (Frequency, %)
Gender	Medical doctors	Male	22 (71%)
		Female	9 (29%)
		Total	31 (100%)
	Management	Male	11 (58%)
		Female	8 (42%)
		Total	19 (100%)
Age	(in years)		38.2 (±4.2)
Education level	Medical doctors	Undergraduate (MBChB/MD)	19 (61%)
		Graduate (MMed)	12 (39%)
		Total	31 (100%)
	Management	Undergraduate	14 (74%)
		Graduate	5 (26%)
		Total	19 (100%)
Professional experience	(in years)		6.2(±4.1)

±, standard deviation

4.4 Dual Practitioners versus Non-Dual Practitioners

The study sought to establish the extent of dual practice among public medical doctors included in the study. This question or objective focused on the already established 31 public medical doctors across the three hospitals included in the study. The outcome reported in Table 4.3 of the study reveals that in general, about 17 (54%) of the medical doctors are engaged in dual practice. That is to say, they practice both in public practice and private practice. Also, about 14 (46%) of the medical doctors across the three public hospitals under investigation are non-dual practitioners. That is to say, these public medical doctors are only engaged in public practice. The study further disintegrates the data. For instance, of the 54% of the public medical doctors who engage in a dual practice, approximately 14 (82%) of them are male public medical doctors. Only 3 (18%) of dual practitioners are female medical doctors. Subsequently, the study reported that of the 46% of the non-dual practitioners, 8 (57%) were male medical doctors whereas 6 (43%) were female medical doctors.

Table 4.3 Dual Practitioners versus Non-Dual Practitioners Summary Results

Characteristics	Category	Total	Non-dual practice	Dual practice
Total count		31 (100%)	14 (46%)	17 (54%)
Gender	Male	22 (62%)	8 (57%)	14 (82%)
	Female	9 (38%)	6 (43%)	3 (18%)
Age	(in years)	37.1 (±4.4)	35.3 (±3.1)	39.2 (±4.1)

±, standard deviation

The essence of determining the gender of both the dual practitioners and the non-dual practitioners was to demonstrate the extent to which both genders engage in either dual practice or non-dual practice. Regarding the age of the non-dual practitioners versus dual practitioners across the three hospitals, the study established that in totality (general), public medical doctors included in the study had an average age of 37.1 years with a standard deviation (±4.4). Moreover, the average age of the dual practitioners is 39.2 years with a standard deviation (±4.1) while the average age of the non-dual practitioners is 35.3 years with a standard deviation (±3.1). The

significance of this finding is that it portrays a picture regarding which public medical doctors (either young or old) engage in dual practice and non-dual practice.

Besides their first job, the study sought to establish how much income dual practitioners earn in their second clinical job monthly. Results in Table 4.4 reveal that majority of public medical doctors engaged in dual practice (dual practitioners), 7 (41%), across the three public hospitals under investigation stated that their income from the second clinical job ranges between KES 50,000 – 100,000 monthly. Also, about 5 (29%) of public medical doctors engaged in dual practice indicated that they earn an average monthly income of KES 100,000 – 150,000 from their second clinical job. Approximately 3 (18%) of the medical doctors suggested that they earn an average monthly income of above KES 150,000 from their second clinical job while only 2 (12%) of the medical doctors engaged in dual practice earn less than KES 50,000 in their second clinical practice. The study, however, did not establish the hours that all public medical doctors engaged in dual practice spend in their second job or practice.

Table 4.4 Salary from Dual Practice (Second Clinical Practice)

Salary	Frequency	Percent (%)
Less than KES 50,000	2	12%
KES 50,000 – 100,000	7	41%
KES 100,000 – 150,000	5	29%
Above KES 150,000	3	18%
Total	17	100.0%

*KES – Kenya Shillings

The study further demonstrated the perception of medical doctors towards their current income in their various hospitals. The aim was to differentiate the perception of dual practitioners versus non-dual practitioners towards their income across the three public hospitals included in the study. As reported in Table 4.5 of the study, the results demonstrate that of the 17 (54%) of public medical doctors engaged in dual practice, 13 (76%) of them have a low perception towards their current income in their first practice (public practice). Further, only 4 (26%) of the medical doctors have a medium perception towards their current salary – as such could be the reason why they engage in the dual practice. The perception of public medical doctors engaged in dual practice,

however, differs from the medical doctors engaged in non-dual practice. For instance, results in Table 4.5 show that of the 14 (46%) of the medical doctors engaged in non-dual practice, about 9 (65%) have a medium or a moderate perception towards their current salary in their respective hospitals.

Additionally, 3 (21%) of the public medical doctors engaged in the non-dual practice are highly satisfied with their current salary while only 2 (14%) have a low level of satisfaction with their current income. Thus, it is evident that the perception of dual practice versus non-dual practice public medical doctors towards their current income across the hospitals differ to a greater level. This finding implies that public medical doctors who have a low level of satisfaction with their current public practice income or salary may tend to consider second clinical practice – dual practice. However, those public medical doctors who have a high or medium level of satisfaction with their public practice income may decide to only stick to public practice (non-dual practice).

Table 4.5 Perception of Medical Doctors towards their Current Income/Salary

Satisfaction level	Dual practice	Non-dual practice
High	-	3 (21%)
Medium	4 (26%)	9 (65%)
Low	13 (76%)	2 (14%)
Total count	17 (54%)	14 (46%)

4.5 Forms/Modes of Dual Practice of Medical Doctors

In this section, the study investigated the types/forms/features of the dual practice of medical doctors in public hospitals. The objective was to highlight how public hospital medical doctors carry out their dual practices either inside or outside the public health institutions. Results are presented in figure 4.1 of the study.

Figure 4.1 of the study summarizes types or forms of dual practice of medical doctors in the public hospitals; dual practice inside the public hospitals only, dual practice outside public hospitals only, dual practice both inside and outside public hospitals, and other forms of dual practice. Briefly, in the context of this study, dual practice inside the public hospitals only is where a public medical doctor engages in clinical

practices of referring patients to private health facilities for further treatment without the doctor taking part in the further treatment outside the public practice.

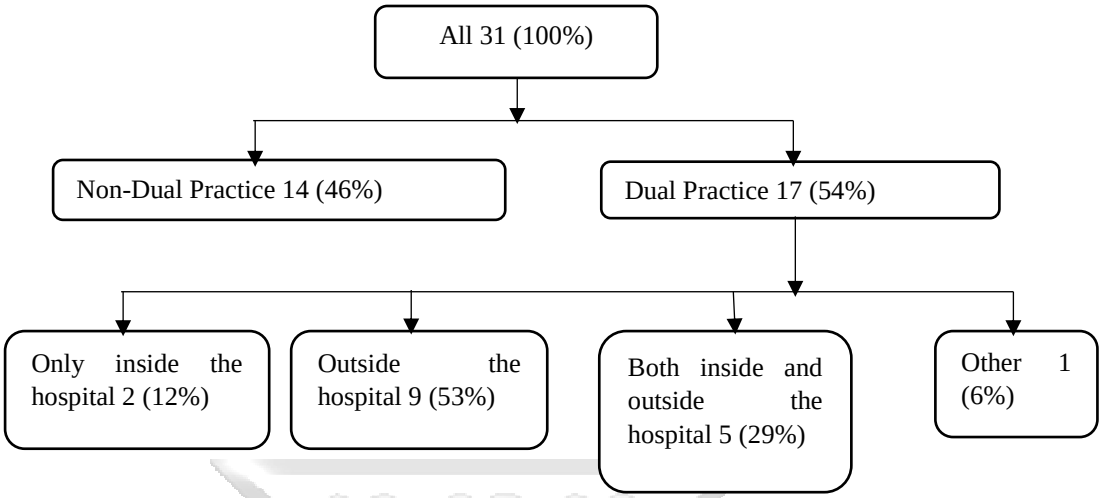

Figure 4.1 Forms/modes of Dual Practice of Public Hospital Medical Doctors

As findings exhibits in Figure 4.1 of this study, 14 (46%) of the medical doctors included in the study fall in the category of non-dual practice while 17 (54%) fall in the category of dual practice. The findings further reveal that about 9 (53%) of public medical doctors engaged in dual practice in private health facilities practices dual practice outside the public hospital. That is to say, these public medical doctors have a private clinical practice outside the public health facilities and could be practicing in other private hospitals. Approximately 5 (29%) of public medical doctors engaged in dual practice practices dual practice inside and outside the public hospital. That is to say, these dual practice medical doctors can not only refer patients to private health facilities but can also follow and treat such patients in private health facilities. Consequently, findings indicate that around 2 (12%) of the public medical doctors who engage in a dual practice, practice dual practice only inside the public hospital while only 1 (6%) of the public medical doctors engage in other forms of dual practice. - Thus, the study established that the most form or type of dual practice of public medical doctors in public hospitals in Kenya happens outside the hospitals. The assumption derived from this finding is that the dual practice outside the public hospital can either be privately owned hospitals by dual practitioners or by other people (who employ public medical doctors from the public hospitals).

4.6 Reasons for Engaging in Dual Practice

The study further sought to establish from the public medical doctors and the management of the three hospitals included in the study the reasons why public medical doctors engage in the dual practice. The study gathered both quantitative and qualitative information. According to the study findings, as shown in Table 4.6, all the 31 medical doctors and 19 management participants included in the study across the three public hospitals indicated that the main reason public hospital medical doctors engage in dual practice is to earn additional income since their first job does not pay well. However, this perception is stronger among the public medical doctors engaged in dual practice. Additionally, 17/31 (54%) of the public medical doctors indicate that the reason they engage in dual practice is to gain valuable experience (improve skills). 13/19 (68%) of the management hold a similar thought. About 10/17 (59%) of the public medical doctors and 7/15 (47%) of the management think that the reason why public medical doctors engage in dual practice is because of better private health facility structures.

Table 4.6 Reasons for Dual Practice Engagement

Reasons for engagement	Medical doctors	Management
To earn additional income since the first job does not pay enough	31/31 (100%) 17/31 (54%)	19/19 (100%)
To gain valuable experience (improving skills)	10/17 (59%)	13/19 (68%)
Better private health facility structures	9/26 (35%)	7/15 (47%)
Flexible working hours	12/30 (40%)	4/18 (22%)
Interesting working roles and/or positions	6/17 (35%)	4/11 (36%)
Better supply of medicine and equipment		4/12 (33%)

*Multiple responses were allowed

Table 4.6 further reports that about 9/26 (35%) of public medical doctors and 4/18 (22%) of the management think the reason why public hospital medical doctors engage in dual practice is because of better working hours. Moreover, 12/30 (40%) of medical doctors and 4/11 (36%) of the management think dual practice is rampant among some public hospital medical doctors due to interesting working hours. However, only 6/17 (35%) of public hospital medical doctors and 4/12 (33%) of the management of public

hospitals think the reason why public medical doctors engage in dual practice is because of a better supply of medicine and equipment in the private health facilities. This last part of the finding of the study, thus, is very interesting as it shows that only a few of the public hospital medical doctors engaged in dual practice think private health facilities are better equipped with medical supplies and equipment compared to 65% of the public medical doctors.

A qualitative study was also conducted to understand other reasons or factors that make public medical doctors engage in dual practices. The objective of the qualitative finding sought to illustrate the opinions and intuitions of public medical doctors towards dual practices. One of the dual practitioners said:

> "We engage in dual practices as one way to meet the healthcare demand in the country. For some reason, the number of people seeking health services has increased. One way to attend to their needs is by us, medical doctors, doubling our roles both in public and private practices. We believe we should attend to patient needs either in the public or private hospitals" A dual practitioner.

Another public hospital medical doctor who engages in dual practice also mentioned the autonomy that comes with clinical practice in private health institutions. For instance:

> "Part of the reasons why some of us engage in private practice is the higher autonomy available in private health institutions. We have the freedom to engage in some activities aimed at growing private practices compared to when we are in the public sector. Additionally, there is the freedom to participate in decision making, career growth such as furthering our studies. Subsequently, higher autonomy in private practice has led to an increased patient-doctor relationship which makes our work as doctors easy in private health institutions. Therefore, this freedom makes dual practice much attractive to some of us (medical doctors) in the public health institutions" A dual practitioner.

4. 7 Reasons for Commitment to Public Practice

Subsequently, this study assessed the reasons for public medical doctors' commitment to public practice. Specifically, the study investigated the motivating factors that increase public hospital medical doctors' commitment to public practice as well as the conditions under which public hospital medical doctors engaged in dual practice would be willing to give up a private practice for public practice. The objective was to understand the perception of the medical doctors and the management participants across the three public hospitals included in the study. The results presented in Table 4.7 provide that close to 21/31 (68%) of the medical doctors and 4/11 (36%) of the management involved in the study indicated that career development is one of the motivating factors for public hospital medical doctors' commitment to public practice. Also, 11/24 (46%) of the medical doctors provided building reputation as a motivating factor for increased commitment to public practice among public hospital medical doctors. 7/26 (27%) of the public hospital medical doctors, however, mentioned training and research opportunities as the other motivating factors for public hospital medical doctors' increased commitment to public practice.

The majority of the medical doctor respondents 24/30 (80%), however, provided "upholding the responsibility of public health for all" as the motivating factors behind their increased commitment to public practice. The majority of the management respondents, 12/19 (63%), also hold a similar view regarding public hospital medical doctors' assertion that "upholding the responsibility of public health for all" is a major motivating factor for remaining in public practice despite private practice among other public hospital medical doctors. Regarding the feeling and duty to uphold responsibility for public health for all, one of the public hospital medical doctor respondent who is engaged in non-dual practice said that:

> "The Constitution of Kenya (CoK) provides that every Kenyan should have access and affordable health care. As such, it is my responsibility as a medical doctor to uphold this responsibility since the majority of Kenyans can only access health care services in the public health institutions" Non-dual practitioner.

Table 4.7 Motivating Factors that Increases Commitment to Public Practice

Motivating factors for increasing commitment to public practice	Medical doctors	Management
Career development	21/31 (68%)	4/11 (36%)
Uphold responsibility of public health for all	24/30 (80%)	12/19 (63%)
Building reputation	11/24 (46%)	7/17 (41%)
Training and research opportunities	7/26 (27%)	4/15 (27%)

*Multiple responses allowed

According to another public hospital medical doctor engaged in non-dual practice in one of the three hospitals included in the study, the respondent posits that;

> "Working in the public sector provides prospects for career development. The government in most cases sponsors the majority of their workforce to increase their professional training which enhances their skills. Thus, we as medical doctors engaged in public practice have high chances of furthering our studies through short courses that are currently offered in high learning institutions in partnership with the government and public health institutions" Non-dual practitioner.

Besides, Table 4.8 reveals the results about conditions under which public hospital medical doctors engaged in dual practice would be willing to give up a private practice for public practice. Results indicate that 20/31 (65%) of the medical doctors and 7/19 (37%) of the management provided a condition like a salary increase in the public practice. 13/27 (48%) and 6/11 (55%) of the medical doctors and the management respectively suggested the provision of benefits like housing be another condition under which dual practitioners would be willing to give up a private practice for dual practice. The majority of the respondents in both the categories – 24/31 (77%) of medical doctors and 11/16 (69%) of the management – see faster promotion as the leading condition to give up a private practice for the public practice among public hospital medical doctors engaged in dual practice.

Lastly, Table 4.8 also shows that 16/31 (52%) of the medical doctors and 12/18 (67%) of the management also think that providing job security could be an additional condition for medical doctors engaged in dual practice to give up their private practice

for public practice. The implication of this finding is very important to the study as it demonstrates the motivating factors that increase commitments as well the conditions under which medical doctors engaged in dual practice would be willing to give up a private practice for dual practice.

Table 4.8 Conditions to give up Private Practice for Public Practice

Conditions under which dual practitioners would be willing to give up a private practice for public practice	Medical doctors	Management
Salary increase	20/31 (65%)	7/19 (37%)
Provision of benefits such as housing	13/27 (48%)	6/11 (55%)
Faster promotion	24/31 (77%)	11/16 (69%)
Job security	16/31 (52%)	12/18 (67%)

*Multiple responses allowed

Despite the majority of the medical doctors who participated in the study giving out conditions under which they would be willing to let go of their private practices, a few of the public hospital medical doctors, for instance, 10/31 (35%), however, were not in any way declare their stand on the conditions they would be willing to give up their private practice for public practice. One of the public hospital medical doctor respondent engaged in dual practice postulated that:

> "So far, I find the dual practice very much okay with me, and depending on how hard I work to deliver in both the private and public practice, I am not convinced that the public practice would be able to meet my target. However, I still hold high ethical standards in both practices" Dual practitioner.

4.8 Consequences of Dual Practice

A review of the quantitative and qualitative data from the respondents established that implications or consequences of dual practice on the public health services vary; some positive and some negative. Moreover, the consequences range on patients, medical doctors themselves, public health institutions, and the overall health sector among

others. Regarding the positive consequences of dual practice in general, public hospital medical doctors engaged in dual practice argue for dual practice. According to one of the dual practitioners, the respondent explained that;

> ”Dual practice is beneficial in some ways such as improving knowledge, supplementing public practice income, improving social welfare, and significantly improving access to medical services among the population.” Dual practitioner #1

Additionally, another public hospital medical doctor engaged in dual practice explains that;

> “Of late, there is a growing need for health care services among the people. As the population increases so does the demand for health care services. However, as a country, Kenya, we are facing a huge doctor-patient gap. This is according to the previous WHO report. Therefore, to try and provide health services to some of the patients who cannot access public health services due to other reasons like full capacity, we try and engage in private practice. Whereas many people see our act or behavior as money-oriented, our main objective in dual practice is to complement public health practice through private practice.” Dual practitioner #.

However, to a few of the public hospital medical doctors engaged in dual practice, to some extent, dual practices pose some challenges to the health sector. This view supports the notion or perception of the public hospital medical doctors engaged in non-dual practice. According to the study findings, the majority of the public hospital medical doctors engaged in non-dual practices believe that dual practice has significant negative consequences on public health sector delivery. For instance, some of them posit that;

> “In terms of general effect, dual practices decrease the quality of health services in public hospitals. It brings social trust issues and increases the rate of absenteeism among public hospital medical doctors engaged in dual practices

In the opinion of one of the management respondent in one of the three hospitals under examination, the respondent postulates that;

> "Dual practice continues to grow and the majority of individuals involved in dual practice (private practice) find it interesting. However, to some of us, the management and maybe some non-dual practitioners, we find it a bit unethical and may result in so many challenges to the public health sector in terms of health services deliveries. Such include growing misuse of public health resources where some dual practitioners collude with other management individuals to divert public health institution resources to their privately own health facilities. This is one of the challenges we are facing. As a result, it has worsened the health service equity in the health sector where only a few individuals with money can access health services in some of the privately-owned hospitals while the majority of ordinary Kenyans have little or nothing to celebrate when they visit public health institutions" Management respondent.

CHAPTER FIVE

DISCUSSIONS, CONCLUSIONS, AND RECOMMENDATIONS

5.1 Introduction

The purpose of this mixed-method study was to assess the dual practice of public hospital medical doctors at county referral hospitals in Nairobi, Kenya. The three referral hospitals included in the study included Pumwani hospital, Mbagathi hospital, and Mama Lucy hospital. The chapter covers the discussion of major findings of the study as related to the literature on the dual practice of public hospital medical doctors across the world. Specifically, the discussion centers on key research questions as provided.

This chapter of the research study entails discussions aimed to answer the following research questions:

i) What is the prevalence or extent of the dual practice of public hospital medical doctors at county referral hospitals in Nairobi, Kenya?
ii) What are the forms and/or modes of dual practice of public hospital medical doctors at county referral hospitals in Nairobi Kenya?
iii) What are the factors that drive the dual practice of public hospital medical doctors at county referral hospitals in Nairobi, Kenya?
iv) What are the reasons for commitment to public hospitals among public hospital medical doctors at the county referral hospitals in Nairobi, Kenya?
v) What are the consequences of impacts of dual practice of public hospital medical doctors at county referral hospitals in Nairobi, Kenya?

In summary, this is the final chapter of the study. It provides a detailed discussion of the study findings. The discussion is linked to the established available empirical synthesis under the literature review chapter of the study. The chapter also covers the conclusion, recommendation, limitation of the study, and areas of further study.

5.2 Discussion

The theoretical contribution of this study is very important in understanding the concept, significance, and challenges of public hospital medical doctors' dual practice. Using the Dual-Job Holding and Job Mobility model as provided by Paxson and Sicherman, the study holds the assumption that stochastic preferences like inflexible working hours within jobs and mobility costs are not an option regarding the decisions when an individual is seeking to hold two jobs. This is because these preferences may in most cases diverge. Thus, benefits that an individual gets from the second job are key when factors such as income are held constant. This model, therefore, is significant in demonstrating how public hospital medical doctors may make decisions under certain circumstances.

Also, the outcome of the study is significant for understanding the significance of stewardship theory in line with the dual practice of public hospital medical doctors. This is because, in the face of changing health care needs and increased health care investments and financing, institutional behavior can help to produce a better health-related outcome. That is to say, a form of governance necessary to emphasize trust and ethical behavior among public hospital medical doctors and the management of public hospitals as the agents of the government. Therefore, public hospital medical doctors who engage in a dual practice, as well as non-dual practice, should develop the willingness to be more accountable for the well-being of public health facilities. Applying the stewardship theory, therefore, assist the study to emphasize the reasons for commitment to public practice and/or private practice.

The discussion of the findings of this study is as follows;

5.2.1 Prevalence and Perception of Dual Practice of Public Hospital Medical Doctors

The first aim of this study determined the prevalence or extent of the dual practice of public hospital medical doctors at county referral hospitals in Nairobi, Kenya. The quantitative analysis conducted reported that the prevalence of dual practice among public hospital medical doctors at county referral hospitals in Nairobi is about 54%. The outcome of this study is similar to earlier findings on the prevalence of the dual

practice of public hospital medical doctors across the world. For instance, recent studies conducted in Vietnam (Vujicic, Shengelia, Alfano, & Thu, 2011; Do & Do, 2018) indicated that the prevalence of dual practice among health medical doctors (physicians) ranges between 30% and 48%. The studies further postulate that the growing changes in the macro-economic environment from planning to a market-oriented model could have resulted in the dual practice of public hospital medical doctors. Thus, making it an area of concern for public healthcare management in low and middle-income countries (LMICs).

Though the prevalence or extent of dual practice among medical doctors as discussed by Vujicic et al and Do and Do above may appear lower than the prevalence of dual practice established in this study, there are studies that have reported a higher prevalence of public medical doctors' dual practice. For example, Hipgrave and Hort (2013) conducted a study on the dual practice of physicians in Australia and Bangladesh and reported that the extent of medical doctors' engagement in private practice is between 79% and 80% respectively. The contribution of private practice is important, especially when the demand for health services overwhelms the public practice. In Asia, for instance, there are more than 60% of private-sector contributions to health care services (Ferrinho, Van Lerberghe, Fronteira, Hipólito, & Biscaia, 2004). The authors further argue that the growing contribution of the private health sector has resulted in increased private practice in countries such as Malaysia as well.

Ferrinho et al found out that in Malaysia alone, the prevalence of dual practice increased from 43% in 1975 to around 70% in the 1990s. Additionally, the results reported in this study suggested that dual practice is not only common among male medical doctors but is also common among public hospital medical doctors who are older compared to their young counterparts. The finding supports suggestions provided in previous studies. For instance, Ferrinho et al., (2004) found out that physicians with a high level of experience and older tend to engage in dual practices compared to their juniors or young medical doctors. Previous studies, however, have shown that the extent of dual practice varies according to urban and rural settings. In Egypt, for instance, Ferrinho et al posit that about 85% of rural-based medical doctors are likely to engage in dual practice compared to 71% of urban-based medical doctors.

Under this objective, the study also discusses the perception of public hospital medical doctors towards their income or salary in the public practice. According to the results obtained, the study reports that the majority of public hospital medical doctors who engage in dual practice have a low level of satisfaction with their current income in their various public practices. This finding is in agreement with the previous results from other studies. For instance, according to Johannessen and Hagen (2014), medical doctors prefer to engage in dual practice simultaneously to achieve the desired income. Accordingly, the findings of this study also concur with Chen et al., (2016) who conducted a study in Shanghai China on factors influencing the perception of the medical staff of the dual practice. The authors established that medical doctors who engage in dual practice have a positive perception towards dual practice as a result of the level of satisfaction of their current income in the public practice.

About the proportion of income that public hospital medical doctors who engage in dual practice get from their second clinical job, findings reveal that majority of the public hospital medical doctors get between KES 50,000 – 100,000 while others earn more than KES 100,000 and above. Therefore, based on the previous studies, for instance, Russo et al., (2018) the need to increase the overall income proportion by supplementing income from the main income in public practice is the most common in countries such as Northern Ireland and the UK. The authors also suggest that the need to generate additional income to supplement the public practice income among public hospital medical doctors encourages dual practice. However, Russo's et al study did not clearly illustrate the proportion of income that public hospital medical doctors who engage in dual practice get from their second clinical job.

5.2.2 Forms/Modes of Dual Practice of Public Hospital Medical Doctors

The second objective of the study established the forms and/or modes of dual practice of public hospital medical doctors at county referral hospitals in Nairobi, Kenya. At a time when Kenya aims to achieve UHC, it is significant to understand the forms or modes of dual practice among medical doctors. The review of the study findings reveals that public hospital medical doctors at the county referral hospitals engage in a dual practice, with varying forms or modes such as inside, outside, and both inside and outside public practice. According to the study findings, the most common form or mode of dual practice of public hospital medical doctors is dual practice outside the

public hospital only. The finding agrees with previous studies such as Rispel et al., (2014) whose study demonstrated that most physicians or public hospital medical doctors who engage in dual practice prefer an external environment. That is to say, private practice outside the public hospital.

Moreover, the results of this study indicate that most public hospital medical doctors who engage in the dual practice (second clinical job) find it safe and convenient to engage in dual practices outside the public hospital. However, the respondents who were public hospital medical doctors who engage in dual practice failed to highlight some of the reasons as to why they mostly prefer dual practice outside the public health institutions. The outcome of the study is in agreement with McPake et al., (2016). According to McPake's et al study, most public hospital medical doctors would prefer to engage in dual practice outside the public hospital to remain true to their first clinical job – public practice. The authors first indicated that engaging in private practice outside the public facilities is safe and convenient as it does not attract public uproar or criticisms that come with access to health services in the public practice.

Subsequently, the qualitative findings of this study report that public hospital medical doctors who engage in dual practice work in distinct private facilities which are majorly managed and run by other individuals or management other than the dual practitioners themselves. As Russo et al., (2018) earlier indicated, these private health institutions are not similar or related to the public hospital in any way. However, there is also evidence that to some extent, public hospital medical doctors may engage in dual practice outside private hospitals besides the public health institutions where they can easily refer patients from the public hospitals to their private practice engagement. In their study, the authors, however, further explained that in unregulated health systems, there may exist a combination of various forms of dual practice.

The reasons as to why public hospital medical doctors engage in dual practice outside the public practice, however, remains scanty. According to Gonzalez and Macho-Stadler (2013), public hospital medical doctors prefer outside private practice due to several reasons. The authors explain that the most important reason why public hospital medical doctors prefer private practice outside a public hospital is to remain ethical and not to jeopardize the accessibility of health services in public health institutions. The study also concurs with Russo et al (2013) who also held a similar

view in their previous findings. According to these researchers, public medical doctors do still have some public responsibility to hold and to serve the people in public health facilities despite engaging in private practices outside the public facilities.

5.2.3 Reasons Why Public Hospital Medical Doctors Engage in Dual Practice

Given the earlier results that the majority of public hospital medical doctors who participated in the study engage in dual practice, the study saw the need to establish the reasons for public hospital medical doctors' dual practice engagement. The findings revealed that of all the public hospital medical doctors who engage in the dual practice, their main reason for engaging in dual practice is to earn extra income or salary to support their set living standards. The findings are consistent with the literature from the physicians' perspectives, For instance, Ashmore and Gilson (2015) found out that low public pay creates the need for public hospital medical doctors at the county referral hospitals to resort to dual practice as a way to supplement the current income that they receive from their various public practice.

Additionally, the study also concurs with Abera et al., (2017) whose study found out that indeed public hospital medical doctors' major reason for engaging in dual practice is to get better income compared to what the government pays them in public health institutions.

As reported by both public hospital medical doctors and the management across the three hospitals included in the study, findings reveal that public hospital medical doctors engage in dual practice to gain valuable experience and skills. According to the study findings, public hospital medical doctors who engage in dual practice believe that the ability and opportunities to engage in private practice present them with an opportunity to gain new clinical skills that are useful in enhancing their public clinical practice. Accordingly, public hospital medical doctors who engage in dual practice argue that the skills they attain from the dual practice enable them to access interesting working roles or job positions in other private practice. The findings of the study are in agreement with previous studies. Reports established in previous studies such as Garcia-Prado and Gonzalez (2011) showed that the need for critical skills and experiences in the health sector contributes to public hospital medical doctors choosing to engage in the dual practice.

In other quantitative findings, the study established that only a few of both public hospital medical doctors and the management drawn from the three hospitals included in the study believe that public hospital medical doctors engage in dual practice because of better health facilities and medicine supply in private institutions. This, therefore, implies that not all public hospital medical doctors who engage in dual practice think that private facilities are better equipped with enough medicine supply. This brings to the assumption that to some extent, there may adequate medicine supply in public facilities. This finding, therefore, challenges the existing assumption provided by Socha and Bech (2011) that public hospital medical doctors perceive private health institutions as having modern healthcare technology equipment which may be essential in growing their experience in terms of usage leading to useful skills needed in public practice.

In qualitative findings, some of the public hospital medical doctors across the three hospitals under investigation added that they engage in dual practice simply because it leads to career development. Accordingly, the management from these hospitals is also of the opinion that private practice provides an opportunity for further career development for public hospital medical doctors who engages in the dual practice. However, the majority of the management respondents perceive the training and development in public practice to be better. This finding of the study, therefore, disagrees with previous results, for instance, Bayat et al (2018) whose study suggested that career development and professional growth remain a significant challenge in public health facilities. This study finding implies that some public hospital medical doctors may decide to engage in dual practice as a strategy to take advantage of the available career development opportunities in both private and public practice.

5.2.4 Reasons for Public Hospital Medical Doctors' Commitment to Public Practice

Similarly, the study investigated the motivating factors for public hospital medical doctors' commitments to public practice. According to the non-dual practitioners, one of the important motivating factors for remaining in the public practice is the need to uphold public responsibility which advocates for equitable, accessible and affordable health services for all. Perhaps as enshrined in Kenya's Constitution and the need for UHC. The finding of this study supports previous studies such as McPake et al., (2016)

whose study in Vietnam found out that most public hospital medical doctors who practice non-dual practice are driven by a lack of self-interest and the need to uphold public responsibility The findings also support Do and Do's (2018) views that these public hospital medical doctors who engage in non-dual practices understand the essence of the need to make healthcare affordable for the majority of the people in their countries, especially individuals who cannot afford private health facilities.

Other medical doctors (both dual practitioners and non-dual practitioners) also explained that there are other motivating factors as to why they have not left public practice entirely. Such include training and research opportunities that come with practicing in public health facilities. The qualitative findings reveal that most medical doctors are aware of available government programs for public health facilities aimed at making adequate training clinical activities for them. Because of this, they partly engage in dual practices, however, with more focus on public practice. Other reasons for commitments include the need to maintain and build a reputation as well as grow their careers. The findings support previous results that most public hospital medical doctors are committed to public practice (Garcia-Prado & Gonzalez, 2011; Russo, McPake, Fronteira, & Ferrinho, 2013) due to free training opportunities available for doctors in the public health facilities in partnership with the government.

The study further established conditions under which dual practitioners would be willing to give up a private practice for public practice. Of the available factors, the majority of the public hospital medical who engages in dual practice mentioned salary increase as the most critical aspect. This position was supported by management respondents who argued that in the current environment and because of the growing cost of living, most public hospital medical doctors who engage in dual practice want salary increase to stop the private practice. According to public hospital medical doctors who engage in a dual practice, if the government and the management of public health institutions would be willing to increase their salary as per the expectations, they would be willing to effectively give up a private practice and focus on public practice alone. The findings are in agreement with Russo's (2013) finding that salary or income is the motivating factor for either engaging in dual practice or non-dual practice. According to the authors, public hospital medical doctors who perceive their salary to be high and better would prefer public practice over private practice.

Moreover, both public hospital medical doctors and the management respondents across the three hospitals included in the study also added that other conditions under which public hospital medical doctors who engage in dual practice would be willing to give up a private practice for public practice include faster promotions, job security, and provision of benefits such as housing. The quantitative and qualitative outcome of the study supports previous results that most public hospital medical doctors who engage in dual practice would be willing to concentrate on public practices only if the conditions such as salary increase, promotion, job security, and provision of housing benefits are addressed amicably (Russo, McPake, Fronteira, & Ferrinho, 2013).

5.2.5 Consequences of Dual Practice of Public Hospital Medical Doctors

The final objective of the study assessed the consequences of the dual practice of public hospital medical doctors at county referral hospitals in Nairobi, Kenya. From the study results, both qualitative and quantitative results demonstrated that the consequences of the dual practice of public medical doctors are twofold; positive and negative. For the public hospital medical doctors who engage in a dual practice, they argue that engagement in public and private practices improves knowledge which is essential in enhancing health services in the public sector. That is, private practice enables them to gain diverse experience thus making them experts in various fields of practice. The study findings concur with previous results from different countries such as Moghiri et al., (2016) whose study reported that dual practice may result in positive health services delivery. The authors added that public hospital medical doctors who engage in dual practice can acquire experience and grow their skills on how to use modern health equipment which may only be available in the private sector.

Subsequently, public hospital medical doctors argue that gaining skills through dual practice means the availability of high-quality medical professionals in the public sector. The study also established that the majority of the public hospital medical doctor respondents for dual practice believed that dual practice may improve access to various health services both inside and outside public health facilities. Such include the provision of quality health services due to the availability of health professionals, access to health services both in private and public health facilities, and equity. The study findings are in agreement with previous findings reported in the literature of the study. For example, Kiwanuka et al., (2011) indicated that allowing dual practice

among public medical doctors could ease the pressure on public health facilities and help the health sector to adequately target health services to the minority who cannot afford costly health services. Additionally, the study findings agree with Garcia-Prado and Gonzalez (2011) who further explained that encouraging dual practice may provide extra incentives for public hospital medical doctors thus allowing them to provide quality health services.

Contrary to the positive consequences, the study also established that the existence of a dual practice of public hospital medical doctors may be harmful to the successful provision of health services in public health facilities. Both the public hospital medical doctors who engage in non-dual practice and the management of the three hospitals included in the study argued that challenges associated with dual practices may include an increase in absenteeism rate among public hospital medical doctors who engages in the dual practice. According to the findings, this act of behavior may worsen equity in the public health sector where public hospital medical doctors who engage in dual practice would refer high-end patients to the private sector. Additionally, the negative consequences of the dual practice of public hospital medical doctors as reported by qualitative findings is that dual practice may distort social trust (medical doctor-patient relationship) and to some extent, results in misuse of public health facility resources.

The findings of this study are in agreement with previous findings regarding the consequences of the dual practice of public hospital medical doctors (physicians). According to previous authors such as Ranson et al., (2010) allowing dual practice may result in a conflict of interest among public hospital medical doctors who engages in the dual practice. This, as the authors postulated, may intentionally result in a decrease in the quality of health services in public health facilities. Also, the study concurs with Socha and Bech's (2011) argument that encouraging the dual practice of public hospital medical doctors may lead to a gradual decrease in social welfare and trust among the majority in society.

5.3 Conclusions

Health care remains a development priority for both developed and developing nations as far as Sustainable Development Goals (SDGs) are concerned. Moreover, countries have been urged to implement UHC as one way to enable access to affordable and

equitable health care services by everyone in society. Kenya, for instance, has not been left behind. Several strategic development plans targeting the health sector have been enacted to assist in achieving health sector goals. However, there lie challenges that require an urgent address. One such challenge is the ratio of doctor to a patient which is growing by the day more than the recommended ratio by WHO. This has increased the demand for health services both in the public and private sectors resulting in dual practice as a strategy among some public hospital medical doctors to address the challenges. This study, therefore, assessed the dual practice of public hospital medical doctors. A detailed conclusion of the study is provided in this section.

The first objective of the study addressed the prevalence and perception of the dual practice of public hospital medical doctors. In establishing that majority of public hospital medical doctors across the three hospitals included in the study engages in dual practice, the study concluded that it is evident that some public hospital medical doctors have a positive attitude towards dual practices. The study also concluded that because some of the public hospital medical doctors have a low level of satisfaction with their current salary in public health facilities, they tend to engage in dual practice to supplement their primary income from their first clinical job.

There are different modes of dual practices as the study found out. Such included inside the hospital, outside the hospital, and both inside and outside public hospitals among others. However, based on the findings, the study concludes that the most common form of dual practice and most practiced in the public hospitals involved in the study is dual practice outside the public hospital. The study further concludes that most public hospital medical doctors who engage in dual practice outside the public hospital operate health facilities separate from the public one, and in most cases, are owned by other individuals or investors and not themselves.

Regarding the reasons why public medical doctors engage in the dual practice, the study concluded that the need for higher income or extra salary tops the list. Also, the majority of the respondents explained that as public hospital medical doctors who engage in dual practice, they do so to gain valuable experience or skills. Because of the rise in competition and the need to provide global standard health services, this study concludes that public hospital medical doctors must develop a high level of professionalism to compete for employment opportunities both in the public and

private health sectors. Nevertheless, the study concludes that reasons as to why public hospital medical doctors engage in the dual practice may vary depending on several factors including age, experience, gender, and even location.

Also, the study reported that the reason why a greater portion of public hospital medical doctors remain true or committed to public health facilities is due to the need to uphold public responsibility. Just like any other country across the world, health care services remain a primary need that every citizen has a right to. For this, working in public health facilities and attending to peoples' needs is satisfying for most public hospital medical doctors who engage in non-dual practices. Therefore, the study concludes that other reasons that make medical doctors committed to public practices include training and research opportunities as well as building a reputation. However, for the public hospital doctors who engage in dual practices, the study concluded that they are willing to give up their private practices for public practice only if some conditions are met. Such conditions include increasing the salary to their expectations, providing them with housing benefits, and assuring them job security in the public practice.

Lastly, the study concludes that dual practice may lead to positive and negative consequences on health care delivery in the health sector. On the positive side, it may results in increased health care professionals as private practice enhances skills and knowledge. It may also improve access to health services since there is a continuous growth in demand for health services among the population. However, the negative consequences of dual practices may include the absenteeism of public hospital medical doctors who engages in dual practice to the public health facilities. It may also result in poor health services provision (quality), misuse of public health facility resources, and poor social trust among others.

5.4 Recommendations

The study has revealed that dual practice exists across public hospitals. At a time when the ratio of doctors to patients is increasing steadily and the government of Kenya is working towards the realization of UHC, there is a need for public health practitioners to address dual practices. The study recommends that readdressing the dual practice of

public hospital medical doctors should be aimed at ensuring that available doctors attend to the growing health service needs of the growing population.

Additionally, as the public health sector continues to face numerous challenges such as workforce strikes due to low pay, there could be high chances of increased public hospital medical dual practice. The study, therefore, recommends the government and other public health sector management address these challenges through increased pay that meets public hospital medical doctor's expectations. This should not only be aimed at tying the doctors to public practice alone but to ensure that they feel motivated to work and improve health services delivery. The study recommends further effective measures to control and ensure that the dual practice of public hospital medical doctors increases access to health services both in the public and private health sectors.

5.5 Areas for Further Studies

This study assessed the dual practice of public hospital medical doctors at county referral hospitals in Nairobi, Kenya. While there are three county referrals in Nairobi, the study recommends that similar research be carried out using more or all county referral hospitals in Kenya to establish the true position or prevalence of the dual practice of public hospital medical doctors. Besides, this study did not cover in detail the extent of regulation of the dual practice of public hospital medical doctors in Nairobi, Kenya. Thus, future research can be carried out on the regulation of the dual practice of public hospital medical doctors and the potential impacts on the health care systems in Kenya.

5.6 Limitations of the Study

This study has some limitations. First, the sample or unit of analysis included in the study does not represent a total sample of public hospital medical doctors from county referral hospitals in Nairobi as well as in Kenya. Although the study included three county referral hospitals, all the hospitals were in Nairobi. Therefore, the prevalence and forms of dual practice patterns may be somehow different from the dual practice in rural areas and other county referral hospitals.

Besides, while the response rate of the study was good for making study analysis and conclusion, the coronavirus pandemic, also known as COVID-19 significantly

interfered with the data collection plans. In the case of the study, one hospital, Mbagathi hospitals, was most affected and, therefore, medical doctors and management from these hospitals did not have ample time to successfully respond to online questionnaires due to their busy schedules. However, the researcher persistently reminded them of the significance of their contribution to the success of this study. Subsequently, this survey was self-administered, so participants may have been reluctant to discuss any other negative effects of dual practice (especially dual practitioners).

However, despite the limitations, this research provides important information on the dual practice of public hospital medical doctors at county referral hospitals, particularly, given the scarcity of research in the area of dual practice in Kenya using referral hospitals. It is important to understand the context of dual practice and develop effective policy frameworks at a time when the demand for health services in the public health sector increases. This is to ease the government's plan to implement across all the 47 counties in Kenya. Therefore, the overall significance of this study provides health practitioners the prevalence of the dual practice of public hospital medical doctors, the reasons for engagement in dual practice, reasons for commitments to public practice, forms of dual practice, and the implications consequences of dual practice to the health sector.

REFERENCES

Abera, G. G., Alemayehu, Y. K., & Herrin, J. (2017). Public-on-private dual practice among physicians in public hospitals of Tigray National Regional State, North Ethiopia: perspectives of physicians, patients and managers. *BMC Health Services Research, 17*(1), 1-8. doi:https://doi.org/10.1186/s12913-017-2701-6

Abera, G., Alemayehu, Y., & Herrin, J. (2017). Public-on-private dual practice among physicians in public hospitals of Tigray National Regional State, North Ethiopia: Perspectives of physicians, patients, and managers. *BMC Health Service Research, 17*(713).

Alaref, J., Awwad, J., Araujo, E., Lemier, C., Hillis, S., & Ozaltin, E. (2017). To ban or not to ban: Regulating dual practice in Palestine.

Alpaslan, B., Lim, K., & Song, Y. (2019). The dynamics of health care and growth: a model with physician in dual practice. Retrieved February 2, 2020

Armstrong, P. (1994). 8 Corporate control in large British companies: the intersection of management accounting. *Accounting as Social and Intitutional Practice*, *24*, 190.

Ashmore, J., & Gilson, L. (2015). Conceptualizing the impacts of dual practice on the retention of public sector specialists - evidence from South Africa. *Human resources for health, 13*(1), 3. Retrieved January 29, 2020

Ashmore, J., & Gilson, L. (2015). Conceptualizing the impacts of dual practice on the retention of public sector specialists-evidence from South Africa. *Human Resour Health, 13*(3). Retrieved March 3, 2020

Bayat, M., Shokri, A., Khodadost, M., Fattahi, H., Mirbahaeddin, E., Harirchi, I., . . . Khalilnezhad, R. (2018). Factors influencing medical specialists' dual practice in the Islamic Republic of Iran. *EMHJ, 24*(9). Retrieved January 27, 2020

Bayati, M., Rashidian, A., Zandian, H., & Alipoori, S. (2019). Dual practice and multiple job holding among Iranian general practitioners: rate and effective factors. *The International Journal of Health Planning and Management*. doi:https://doi.org/10.1002/hpm.2961

Bergman, L. P. (2014). Dual practice in Kampala, Uganda: A mixed methods study of management and policy. *Doctoral dissertation*. Johns Hopkins University. Retrieved November 4, 2020, from https://jscholarship.library.jhu.edu/bitstream/handle/1774.2/37027/PAINABERGMAN-DISSERTATION-2014.pdf

Berman, P., & Cuizon, D. (2004). Multiple public-private jobholding of health care providers in developing countries. *Issues paper-private sector, London: DFID health systems and resource centre*. Retrieved February 1, 2020

Charles, T., & Fen, Y. (2007). Mixed methods sampling: A typology with examples. *Journal of Mixed Methods Research*, 77-100.

Chen, H., Li, M., Dai, Z., Deng, Q., & Zhang, L. (2016). Factors influencing the perception of medical staff and outpatients of dual practice in Shanghai, People's Republic of China. *Patient Preference and Adherence, 10*, 1667.

Creswell, J. W., & Plano Clark, V. L. (2011). *Designing and conducting mixed methods research.* Thousand Oaks, CA: SAGE Publications, Inc.

Creswell, J., & Creswell, J. (2017). *Research Design: Qualitative, Quantitative and mixed methods approaches.* Sage publications.

Do, N., & Do, Y. (2018). Dual practice of public hospital physicians in Vietnam. *Health policy and planning, 33*(8), 898-905. Retrieved January 31, 2020

El Koussa, M., Atun, R., Bowser, D., & Kruk, M. (2016). Factors influencing physicians' choice of workplace: systematic review of drivers of attrition and policy interventions to address them. *Journal of Global Health, 6*(2), 77-89.

Ethridge, D. (2004). *Research Methodology in Applied Economics.* Chicago: John Wiley & Sons.

Etikan, I., & Bala, K. (2017). Sampling and sampling methods. *Biom Biostat International Journal, 5*(6), 215-217. doi:10.15406/bbij.2017.05.00149

Feng, Y., Ma, A., Farrar, S., & Sutton, M. (2015). The tougher the better: an economic analysis of increased payment thresholds on the performance of general practices. *Health economics, 24*(3), 353-371. Retrieved January 29, 2020

Ferrinho, P., Van Lerberghe, W., Fronteira, I., Hipólito, F., & Biscaia, A. (2004). Dual practice in the health sector: review of the evidence. *Human Resources Health, 2*(1), 14.

Flood, C., Allen, P., Thomas, B., & Walker, K. (2015). Restricting private-sector practice using contracts. *CMAJ, 187*(8), 583-586. Retrieved January 31, 2020

Forsberg, B., Montagu, D., & Sundewall, J. (2011, July 1). Moving towards in-depth knowledge on the private health sector in low-and middle-income countries. *Health policy and planning, 26*(1), 1-3. Retrieved January 29, 2020

Garcia-Prado, A., & Gonzalez, P. (2011). Whom do physicians work for? An analysis of dual practice in the health sector. *Journal of Health Policy Law, 36*(2), 265-294.

Garrison Jr, L., Towse, A., Briggs, A., de Pouvourville, G., Grueger, J., Mohr, P., . . . Sleeper, M. (2013). Performance-based risk-sharing arrangements - good practices for design, implementation, and evaluation: report of the ISPOR good practices for performance-based risk-sharing arrangements task force. *Value in health, 16*(5), 703-719. Retrieved February 1, 2020

Gonzalez, P., & Macho-Stadler, I. (2013). A theoretical approach to dual practice regulations in the health sector. *Journal of health economics, 32*, 66-87. Retrieved February 1, 2020

Guest, G. (2013). Describing mixed methods research: An alternative to typologies. *Journal of mixed methods research, 7*(2), 141-151. Retrieved from 3

Hart, O., & Grossman, S. (1986). The costs and benefits of ownership: a theroy of vertical and lateral integration. *Journal of political economy, 94*(4), 691-719. Retrieved February 3, 2020

Hart, O., & Holmstrm, B. (1986). The theory of contracts. Retrieved January 29, 2020

Heponiemi, T., Kuusio, H., Sinervo, T., & Elovainio, M. (2011). Job attitudes and well-being among public vs. private physicians: organizational justice and job control as mediators. *The European Journal of Public Health, 21*(4), 520-525. doi:10.1093/eurpub/ckq107

Hipgrave, D., & Hort, K. (2013). Dual practice by doctors working in South East and East Asia: a review of its origin, scope and impact, and the options for regulation. *Health policy planning, 29*(6), 703-716. Retrieved February 2, 2020

Iqbal, M. (2013). Choice under uncertainty: allais paradox and its paradoxical implication. *Journal of business and economics, 5*(2), 129-148. Retrieved January 31, 2020

Johannessen, K., & Hagen, T. (2014). Physician's engagement in dual practices and the effect on labor supply in public hospitals: results from a register-based study. *BMC health services research, 14*(1), 299. Retrieved February 1, 2020

Kaabi, S. A., Varughese, B., & John, A. K. (2019). Dual practice on health service - should it be promoted in Qatar? *Journal of Clinical and Diagnostic Research, 13*(9), 101-103.

Kahneman, D., & Tversky, A. (1982). *Judgement under uncertainty: Heuristics and Biases.* New York: Cambridge University Press. Retrieved January 30, 2020

Kapoor, N., Kumar, D., & Thakur, N. (2014). Core attributes of stewardship; foundation of sound health system. *International Journal of Health Policy and Management, 3*(1), 5.

Kass, H. D. (1990). *Stewardship as a fundamental element in images of public administration.* (H. D. Kass, & B. Catron, Eds.) London: Sage.

Kenya Health Policy Forum. (2014). *Improving health outcomes and services for Kenyans: Sustainable instotutions and financing for universal health coverage.* Nairobi: Ministry of Health. Retrieved March 20, 2020, from http://documentos.bancomundial.org/curated/es/238631468277741974/pdf/918630WP0P14870nd0Financing0for0UHC.pdf

Kenya Health Workforce Report. (2019). *The statust of healthcare professionals in Kenya.* Retrieved January 30, 2020, from https://taskforce.org/wp-content/uploads/2019/09/KHWF_2017Report_Fullreport_042317-MR-comments.pdf

Khun, M., & Nuscheler, R. (2013). *Saving the public from private? Incentives and outcomes in dual practice.* ECON WPS-Vienna University of Technology. Working papers in economic theory and practice. Retrieved January 28, 2020

Kimathi, L. (2017). Challenges of the devolved health sector in Kenya: Teething problems or systematic contradictions. *Africa Development, 42*(1), 55-77.

Kiwanuka, S., Rutebemberwa, E., C, N., Okui, O., Ssengooba, F., Kinengyere, A., & Pariyo, G. (2011). Interventions to manage dual practice among health workers. *Cochrane Database System Rev*.

Kombo,, D. K., & Tromp, D. K. (2011). *Proposal and Thesis writing. An introduction.* Nairobi: Paulines publication Africa.

Kothari, C. (2012). *Research Methodology: An introduction to research methods and techniques* (Vol. 9).

Kumar. (2018). Dual practice and inequities in access to healthcare: A qualitative study from Kandy. *Original Article, 30*(1), 6-13.

Kumar, R. (2011). *Research methodology step by step guide for beginners* (3 ed.).

McPake, B., Russo, G., Hipgrave, D., Hort, K., & Campbell, J. (2016). Implications of dual practice for universal health coverage. *Bulletin of the World Health Organization, 94*(2), 142-146. Retrieved January 29, 2020

Miles, M., & Huberman, A. (1984). *Qualitative data analysis: A sourcebook of new methods.* Newbury Park, CA: Sage Publications.

Miller, P. G., Johnston, J., Dunn, M., Fry, C., & Degenhardt, L. (2010). Comparing probability and non-probability sampling methods in Ecstasy research: implications for the internet as a research tool. *Sust Use Misuse, 45*(3), 437-450. doi:10.3109/10826080903452470

Moghiri, J., Mohammad, A., Rashidian, A., & Sari, A. (2016). Physician dual practice: a descriptive mapping review of literature. *Iranian journal of public health, 45*(3), 278. Retrieved January 29, 2020

Moghiri, J., Rashidiani, A., Mohammad, A., & Sari, A. (2017). Implications of dual practice among health workers: a systematic review. *Iranian journal of public health, 46*(2), 153. Retrieved January 30, 2020

Montes-Rojas, G., & Pal, S. (2016). Regulation and moonlighting of public health professionals: evidence from Indonesia. Retrieved February 1, 2020

Mugenda, O., & Mugenda, A. (2013). *Research Methods: Quantitative and qualitative approaches.* Nairobi: ACTS Press.

Muruga, G. (2019). Management model to measure and evaluate physicians' dual practice (DP). *European Journal of Business and Strategic Management, 4*(1), 19-29.

Nachuk, S., & Kundra, S. S. (2009). Public Stewardship of Private Providers in Mixed Health Systems. Retrieved September 10, 2020, from https://www.r4d.org/wp-content/uploads/Public-Stewardship-of-Private-Providers-in-Mixed-Health-Systems.pdf

Newing, A. (2011). *Conducting research in conservation.* New York: Routledge.

Njuguna, J., Mwangi, P., & Kamau. (2014). Incentives among health workers in a remote Kenyan district: implications for proposed county health system. *Journal of health care for the poor and undeserved, 25*(1), 204-214. Retrieved February 2, 2020

Panos, G. A., Pouliakas, K., & Zangelidis, A. (2009). The inter-related dynamics of dual job holding, human capital, and occupational choice. Retrieved October 13, 2020, from http://ftp.iza.org/dp4437.pdf

Paxson, C. H., & Sicherman, N. (1996). The dynamics of dual job holding and job mobility. *Journal of Labor Economics, 14*(3), 357-393.

Ranson, M., Chopra M, A., D. P., & Bennett, S. (2010). Priorities for research into human resources for health in low-and middle-income countries. *Bull World Health Organization, 8*, 435-443.

Relman, A. (2008). Medical professionalism in a commercialized healthcare market. *Cleveland and Clinic journal of medicine, 75*(6), 33-36. Retrieved January 29, 2020

Rispel, L., & Blaauw, D. (2015). The health system consequences of agency nursing and moonlighting in South Africa. *Global Health Action, 8*(1), 26683. doi:https://doi.org/10.3402/gha.v8.26683

Rispel, L., Blaauw, D., Chirwa, T., & de Wet, K. (2014). Key factors influencing agency nursing and moonlighting among nurses in South Africa. *Global health action, 7*. Retrieved February 2, 2020, from https://doi.org/10.3402/gha.v7.23585.

Russo, G., Fronteira, I., Jesus, T., & Buchan, J. (2018). Understanding nurses' dual practice: a scoping review of what we know and what we still need to ask on nurses holding multiple jobs. *Human resources for health, 14*, 14. Retrieved February 03, 2020

Russo, G., McPake, B., Fronteira, I., & Ferrinho, P. (2013). Negotiating markets for health: an exploration of physicians' engagement in dual practice in three African capital cities. *Health policy and planning, 29*, 774-783. Retrieved January 22, 2020

Saltman, R. B., & Ferroussier-Davis, O. (2000). he concept of stewardship in health policy. *Bulletin of the World Health Organization, 78*, 732-739.

Schilling, J. (2006). On the pragmatics of qualitative assessment: Designing the process for content analysis. *European journal of psychological assessment, 22*(1), 28-37. Retrieved March 3, 2020

Sekaran, U., & Bougie, R. (2016). *Research methods for business: A skill building approach.* John Wiley & Sons.

Socha. (2010). Physician dual practice and the public health care provision. *Health economics, 4*. Retrieved February 1, 2020

Socha, K., & Bech, M. (2011). The relationship between dual practice and physicians' work behavior in the public hospitals: Results from the Danish survey. *Intitute of Public Health - Health Economics University of Southern Denmark.*

Sousa, A., Scheffler, R., Nyoni, J., & Boerma, T. (2013). A comprehensive health labour market framework for universal health coverage. *Bulletin of the World Health Organization, 91*, 892-894. Retrieved January 30, 2020

Travis, P., Egger, D., Davies, P., & Mechbal, A. (2002). Towards better stewardship: concepts and critical issues. *Geneva: World Health Organization*, 2-48.

Von Neumann, J., & Morgenstern, O. (1953). *Theory of games and economic behavior*. Princeton: Princeton University Press. Retrieved January 31, 2020

Vujicic, M., Shengelia, B., Alfano, M., & Thu, H. (2011). Physician shortages in rural Vietnam: Using a labor market approach to inform policy. *Social Science & Medicine, 73*(7), 970-977.

Weirich, P. (1986). Expected utility and risk. *British journal for the philosophy of science, 37,* 419-442. Retrieved February 1, 2020

WHO. (2015). *No health without a workforce.* Retrieved January 30, 2020, from http://www.who.int/entity/workforcealliance/knowledge/resources/GHWA-a_universal_truth_report.pdf?ua=1

Yang, J. (2006). The privatization of professional knowledge in the public health care sector in China. *Health Sociology Review, 15*(1), 16-28.

APPENDICES

Appendix 1: Consent Form

Study topic: A descriptive study on dual practice of public hospital medical doctors at county referral hospitals in Nairobi Kenya.

Foreword: To study participants

Investigator: Lucy Karugu

Contact: Tel. No: +254 720 751 944; Email:

Purpose of the study: The study aim to describe the dual practice of public hospital medical doctors at county referral hospitals in Nairobi Kenya. The significance of the study is to highlight the prevalence of dual practice and ways to make it beneficial to the health sector.

Ways to participate: You will receive a link through your social media contact or page such as email requesting you to participate in the study. This may take approximately 20-25 minutes.

Voluntary to participate: Participating in this study is voluntary. Should you decide to participate and then change your mind, your right will be respected. You shall have the right to withdraw your consent at any time.

Confidentiality and privacy: All the information provided shall be used for academic purposes only. The information given shall be saved and password protected in the school library.

Risk and benefits: There are no risks involved in the study. Also, there will be no any direct benefits for you in participating in the study. However, the benefit of the study is knowledge contribution.

Should you have further questions, please contact the following persons;

Investigator: Lucy Karugu 0720751944

Research Supervisor:

Enquiries to: The Secretary-Strathmore University Institutional Ethics Review Board, P.O

Box 59857-00200, Nairobi; Emails: ethicsreview@strathmore.edu; Tel No: +254 703 034

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Your signature implies that the study has been explained to you, and that you have been given the opportunity to ask questions, and that you agree to take part in the study

Signature: …… Date: ……..

For Official Use:

Name: ……..... Signature: …….. Date: …….

(Of Research Personnel)

Appendix 2: Questionnaire

This questionnaire seek to provide information on a study on dual practice of public hospital medical doctors at county referral hospitals in Nairobi Kenya. Kindly, provide accurate and reliable information where possible. Thank you.

Section A: Demographic Information

1. Name of your hospital facility ……

2. Please indicate your gender;

Male [ ] Female [ ]

3. Please indicate your age …….

4. What is your level of education/ profession?

Undergraduate (MBChB/MD) [ ] Graduate (MMed) [ ]

5. Please indicate your years of work experience ……..

6. Are you engaged in a second clinical practice?

Yes [ ] No [ ]

7. If yes, how much do you earn in your second clinical practice?

Less than KES 50,000 [ ] KES 50,000-100,000 [ ]

KES 100,000-150,000 [ ] Above KES 150,000 [ ]

8. What is your perception towards your current income in public health facility?

……
……

……
……

9. What forms or modes of dual practice do you engage in? (Multiple response allowed)

Inside public hospitals [ ]

Outside public hospitals [ ]

Inside and outside public hospitals [ ]

Others [ ]

Please explain ……

10. What are some of the reasons/factors you engage in dual practice? Multiple answers are allowed.

Need for more income/salary increase	
Condition of work	
Personal satisfaction	
Need for challenging environment	
Clinical specialization	
Demand for health services by patients	
Higher autonomy in private practice or degree of leisure	
Career development	
Location of health services	

Any other reasons which results to medical doctors engaging in dual practice?

……
…….

……
…….

11. What are some of the reasons you are commitment to public practice? (Motivating factors and conditions under which you would give up private practice for public practice)

Motivating factors	
Career development	
Uphold public responsibility of public health for all	
Build reputation	
Training and research opportunities	
Conditions for giving up private practice for public practice	
Faster promotion	
Provide housing benefits	
Job security	
Increase in salary	

Any other reasons for commitment of medical officers to public practice (public health facilities)?

……
……

……
……

14. What do you think are the main consequences/challenges/benefits of dual practice of medical officers in public health facilities to the public health sector?

……
……

……
……

THANK YOU FOR TAKING THE TIME TO FILL THIS QUESTIONNAIRE

Appendix 3: University Ethical Approval Letter

Strathmore UNIVERSITY

13th May 2021

Dr Karugu Lucy,
lucykarugu@gmail.com

Dear Dr Karugu,

RE: A Descriptive Study on Dual Practice of Public Hospital Medical Doctors in Nairobi County Referral Hospitals in Nairobi, Kenya

This is to inform you that SU-IERC has reviewed and **approved** your above **master's** research proposal. Your application reference number is **SU-IERC0899/20.** The approval period is **13th May 2021 to 12th May 2022.**

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-IERC.
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-IERC within 48 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-IERC within 48 hours
v. Clearance for 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 expiry of the approval period. Attach a comprehensive progress report to support the renewal.
vii. Submission of an executive summary report within 90 days upon completion of the study to SU-IERC.

Prior to 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 also obtain other clearances needed.

Yours sincerely,

for: Dr Virginia Gichuru,
Secretary; SU-IERC

STRATHMORE UNIVERSITY INSTITUTIONAL ETHICS REVIEW COMMITTEE (SU-IERC)
13 May 2021
Email:ethicsreview@strathmore.edu
P.O BOX 59857-00200
NAIROBI-KENYA

Cc: Prof Fred Were,
Chairperson; SU-IERC

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

Appendix 4: University Research Facilitation Letter

Strathmore UNIVERSITY
BUSINESS SCHOOL

Wednesday, 27 May 2020

To whom it may concern,

RE: FACILITATION OF RESEARCH – KARUGU LUCY WARUGURU

This is to introduce Lucy Karugu, admission number **MBA HCM/93036/2016** who is an MBA in Healthcare Management (MBA HCM) student at Strathmore University Business School (SBS). As part of our SBS MBA HCM Master's Program, Lucy is expected to do applied research and to undertake a project. This is in partial fulfilment of the requirements of the Master of Business Administration. She would like to request for appropriate data from your organization to help her finalize her research.

Lucy is undertaking a research project on **"Dual Practice of Public Hospital Medical Doctors in Nairobi Country Referral Hospitals, Kenya."** The information obtained from your organization shall be treated confidentially and shall be used for academic purposes only.

Our MBA seeks to establish links with industry, and one of these ways is by directing our research to areas that would be of direct usefulness to industry. We would be glad to share our findings with you after the research, and we trust that you will find them of great interest, if not of practical value to your organization.

Any assistance you can provide to her will be greatly appreciated and we shall be willing to provide any further information required.

Yours Faithfully,

Veronica Muniu,
Manager – Programs.

Strathmore UNIVERSITY
Ole Sangale Road, Madaraka Estate
P.O Box 59857 00200 Nairobi, Kenya
Cell: +254 703 414695/7
Email: info@sbs.ac.ke or Visit www.sbs.strathmore.edu
Twitter @SBSKenya

Appendix 5: NACOSTI Research Permit

REPUBLIC OF KENYA

NATIONAL COMMISSION FOR SCIENCE, TECHNOLOGY & INNOVATION

Ref No: 807159

Date of Issue: 16/August/2020

RESEARCH LICENSE

This is to Certify that Dr. Lucy Karuga of Strathmore University, has been licensed to conduct research in Nairobi on the topic: A descriptive study on Dual Practice of Public Hospital Medical Doctors at County Referral Doctors in Nairobi County for the period ending : 16/August/2021.

License No: NACOSTI/P/20/6072

807159

Applicant Identification Number

Director General
NATIONAL COMMISSION FOR SCIENCE,TECHNOLOGY & INNOVATION

Verification QR Code

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