ASSESSMENT OF HUMAN RESOURCE PLANNING IN THE MATERNAL HEALTH PROGRAM IN NAIROBI CITY COUNTY

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DECLARATION

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

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DEDICATION

This dissertation is dedicated to all women serving in the public sector having chosen to do so in order to make a difference to their community.

ABSTRACT

In developing countries, human resource planning has not historically been a priority whilst developing maternal health policies in government. This has caused a health workforce crisis which has increasingly grown in prominence in Africa and is the main constraint to strengthening national maternal health systems and achieving maternal health outcomes. This study assessed human resource planning in the maternal health program in Nairobi City County so as to improve human resource productivity in the maternal health program in the County and thereby improve service delivery. The study adopted a mixed methodology approach where both qualitative and quantitative analysis was used. To undertake the study, a total population census was carried out using questionnaires which were subjected to the County Health Management Team and policy makers in the health services sector who bear the responsibility of human resource planning. This entailed collection of data regarding the human resource planning process from formulation to implementation of the ensuing human resource plan. The study adopted a descriptive survey research design. Primary data was collected using questionnaires. This was obtained from published reports and health facilities documented information. The questionnaire was coded using SPSS version 23 according to each variable of the study to ensure the margin of error was minimized and assure accuracy during analysis. Descriptive statistics, mean, frequency, percentages and standard deviations were used for qualitative data. The information was displayed by use of tables, bar charts, graphs and pie charts and in prose-form. Content analysis was used to analyze qualitative data. The expected outcome of the study was that there was a positive relationship between human resource planning and maternal health outcomes. The study also found that the challenges of implementing human resource plans had negative relationship with maternal health outcomes.

Key Words: Human Resource Planning, Maternal Health Outcomes.

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LIST OF ABBREVIATIONS AND ACRONYMS

AMOs	Assistant Medical Officers
ARV	Antiretroviral
BEOC	Basic Essential Obstetric Care
CEOC	Comprehensive Essential Obstetric Care
CFR	Cumberland Fell Runners
CHMT	County Health Management Team
CI	Confidence Interval
COs	Clinical Officers
DTP3	Diphtheria-Tetanus Pertussis
EmOC	Emergency Obstetric Care
GP	General Physicians
GST	General System's theory
HEP	Health Extension Program
HIV	Human Immunodeficiency Virus
HR	Human Resource
HRH	Human Resources for Health
HRM	Human Resource Management
HRP	Human Resource Planning
KDHS	Kenya Demographic and Health Survey
MDGs	Millennium Development Goals
MMR	Maternal Mortality Ratio
MNCH	Maternal, New-Born and Child Health
MNH-HRH	Maternal and Newborn Health- Human Resources for Health
MoH	Ministries of Health
MOs	Medical Officers
RMNCAH	Reproductive, Maternal, New-born, Child, and Adolescent Health
RR	Relative risk
SCHMT	Sub County Health Management Team
TBA	Traditional Birth Attendant

UHC	Universal Health Coverage
WHO	World Health Organization

DEFINITION OF KEY TERMS

Human resource planning: It is a systematic process of forecasting both the prospective demand for and supply of manpower, and employment of skills with the objectives of the organization

Maternal health: Refers to the health (state of physical, mental and social well-being) of women during pregnancy, childbirth and the postpartum period.

Maternal Mortality: It is the death of a woman while pregnant or within 42 days of termination of pregnancy, irrespective of the duration and site of the pregnancy, from any cause related to or aggravated by the pregnancy or its management but not from accidental or incidental causes (WHO, 2012).

Organizational Chart: It is a diagram that shows the structure of an organization and the relationships and relative ranks of its parts and positions/jobs.

Performance Indicators: It is a measurable value that demonstrates how effectively a company is achieving key business objectives.

Recruitment: It involves analyzing the requirements of a job, attracting employees to that job, screening and selecting applicants, hiring, and integrating the new employee to the organization

Retention: It is the overall strategy or ability of an organisation to keep its best employees and hence maintain a lower turnover.

Succession Planning: It is a process for identifying and developing new leaders who can replace old leaders when they leave, retire or die

Supply Forecasting: It is the process of estimating availability of human resource followed after demand for testing of human resource.

Training Needs Assessment: It is concerned with addressing skills gaps at the organizational level, the group level and the individual level.

CHAPTER ONE: INTRODUCTION

1.1 Background of the Study

Human Resource Planning (HRP) is the process of identifying the number of people with a particular skills set to select to perform a certain function in an organization at a particular time (Pradeesh, 2011). In the health sector, it entails the identification of the different cadres of health workers needed to perform their specialized functions in health facilities in order to provide care and achieve the predetermined health outcomes. Human Resource Planning leads to better informed and responsive decision making on talent acquisition, training and management of scarce talents which is characteristic of the health sector, and establishing how they can be leveraged in an effective way to achieve the organizational objectives. According to Mc Graw Hill (2014) Human Resource Planning delivers a rational basis for prioritizing, developing and funding human resources needed for organizational objectives. It translates the organizational objectives and plans into the number and caliber of workers needed to meet these objectives by matching competencies to functions.

In the health sector in Nairobi City County, human resource planning takes a programme based approach which focuses on staffing needs of specific programmes such as public and environmental health, maternal health care, HIV prevention and eradication and communicable disease management. Through human resource planning, each programme is able to achieve the following objectives among others: determine future manpower requirements; attract and retain suitably qualified and skilled staff; undertake responsive succession planning; develop a suitable organizational design; conduct adequate labour forecasting; project career development paths for existing employees; and ensure equal employment opportunities (Yadav & Dabhande, 2014). Summarily, human resource planning is about having the right number of health workers, with the right skills, in the right place, at the right time, with the right attitude, doing the right work, at the right cost and with the right work output (Danlami, 2012).

Health workforce planning has historically not been a policy priority in developing countries and where it has taken place, it is focused on inputs and outputs with emphasis on pre-service education of health workers and ratios of health workers to target populations. Whilst these factors are important, they are only few components of the larger human resource for health management thus a comprehensive approach to

designing health workforce planning is warranted (Bossert, et. al., 2007). This is because cross cutting problems occur across the HRH spectrum such as attractiveness of health professions, multiple job holding and low motivation.

This is supported by the research by AL-Qudah (2014) who studied the effect of human resources planning and training and development on organizational performance in the government sector in Jordan. The results indicated that human resource planning, training and development significantly correlated with the organizational performance in the Jordanian Ministry. The paper provided recommendations for improving human resource planning in the Jordanian Ministry.

1.1.1 Maternal Health Outcomes

Globally, approximately 830 women die from preventable causes related to pregnancy and childbirth, 99% of these maternal deaths occur in developing countries such as Kenya. Maternal mortality is higher in poorer communities particularly in adolescents who face a higher risk of complications and death as a result of pregnancy than other women. According to the World Health Organization(WHO), (2017), skilled care before, during and after childbirth can save the lives of women and newborn babies by meeting the global standards for maternal, new born and child health through the following 11 indicators: (1) Maternal mortality ratio; (2) Under-five child mortality, with the proportion of newborn deaths; (3) Children under five who are stunted; (4) Proportion of demand for family planning satisfied (met need for contraception); (5) Antenatal care coverage (at least four times during pregnancy); (6) Antiretroviral (ARV) prophylaxis among HIV positive pregnant women to prevent HIV transmission and antiretroviral therapy for pregnant women who are treatment-eligible; (7) Skilled attendant at birth; (8) Postnatal care for mothers and babies within two days of birth; (9) Exclusive breastfeeding for six months (0–5 months); (10) Three doses of combined diphtheria-tetanuspertussis (DTP3) immunization coverage (12–23 months); (11) Antibiotic treatment for suspected pneumonia.

At national level, the Constitution of Kenya (2010) is supportive of these health outcomes. Article 43(1) (a) gives every person the right to the highest attainable standard of health, which includes the right to health care services, including reproductive health care. The Constitution also provides that a person has the right to emergency treatment (Article 43(2)). In addition, it provides for a devolved system of governance which gives

the mandate of healthcare provision to county governments, hence providing an opportunity to address historical inequities in access to health services. County governments have grappled with the devolution of health services as demonstrated by the trends in industrial relations which are characterized by frequent strikes and go slows peculiar only to the health services sector.

The Government of Kenya has, in providing for high standards on health in the Constitution, demonstrated that it is committed to universal health coverage (UHC) and accelerated achievement of the Reproductive, Maternal, Newborn, Child, and Adolescent Health (RMNCAH) outcomes. The RMNCAH investment framework responds to the urgent need to maximize the constitutionally mandated right to access RMNCAH services while addressing the concerns of suboptimal targeting and insufficient prioritization of bottlenecks that prevent evidence-based and high impact interventions from being delivered. It proposes effective, efficient and innovative strategies to achieve sustainable, equitable and accelerated improvements in RMNCAH outcomes (Wamalwa, 2015).

Although the recent Kenya Demographic and Health Survey (KDHS) 2014 shows that Kenya has improved most of its RMNCAH outcomes, the Millennium Development Goals (MDGs) for maternal and child health could not be achieved as many challenges in coverage still remain and disparities continue to exist in service delivery. Poor performance is partly as a result of insufficient number of health workers, low standards of health care service delivery, unresponsive policies not aimed at meeting the needs of the community and patients, absenteeism, lack of motivation, job dissatisfaction, lack of professional development, poor attitudes, and working conditions, health-system related factors such as human resources policy influence staff retention and mobility (Ismail & Velnampy, 2012). Poor performance of health facilities leads to inaccessibility of care and contributes to reduced health outcomes as people are not using services or they are mistreated due to harmful practices (Pradeesh, 2011).

1.1.2 Maternal Health Outcomes in Nairobi City County

In Nairobi City County, the maternal health system building block are, medical products, vaccines and technology, leadership and governance, infrastructure, health information, service delivery, health research, health financing and human resources for health. This study however focused on human resource for health as a building block to maternal health service delivery. It is noteworthy that in Nairobi City County, approximately 30%

of the total budget is allocated to the health services sector and a further appropriation made to the maternal health programme through the 'Linda Mama' program which provides free maternal healthcare services in government owned facilities. It is also noteworthy that the greatest expenditure item in the health sector budget is personnel emoluments setting it up as an important economic item to get right.

Interestingly, Nairobi City County has an estimated 88.7% of births taking place within health facilities, compared with 61.2% on a national level. Yet, the neonatal mortality rate in Nairobi is considerably higher than elsewhere in Kenya (39 per 1000 compared with 19–25 per 1000 live births) (Kenya National Bureau of Statistics, 2014). This demonstrates a disconnect at the point of maternal health service delivery as opposed to access to healthcare facilities. Many of the mothers deliver in facilities that are poorly resourced to provide appropriate care to a severely ill newborn. Even where sick newborns access hospital care, data from Kenyan public hospitals would suggest that the quality of care is often poor (Emina, Beguy & Zulu, 2011).

This disconnect in Nairobi City County health facilities is attributable to human resources for health in terms of adequate numbers and productivity. A recent situational analysis has revealed that Nairobi City County managed facilities has a total of 3,434 health workers based on the national Ministry of Health cadres and total stock of 10,584 inclusive of 7,150 Community Health Volunteers. The existing gap based on HRH norms and standards stands at 12,499 health workers in the 102 public health facilities across the County. Although this gap is a major hindrance towards delivering the above set health goals, human resource planning for the current health workforce presents the biggest challenge in Nairobi City County (NCC, 2016).

In response to this, Nairobi County has an elaborate County Health Strategic and Investment Plan (2013 - 2018) aimed at ensuring delivery of quality, equitable and affordable healthcare services. Nairobi City County has its eyes on increasing access to quality healthcare services through rehabilitation, expansion and development of health facilities across the County. Currently, the County has a total of 172 active community units and 105 public health facilities whereby 28 of them are classified under Level 2, 70 under Level 3, while 4 under Level 4 facilities. The county government currently has no level 5 hospitals but plans to upgrade of the current level 4 facilities in the long term (NCC, 2016). The upgrading and expansion of health facilities to improve service

delivery therefore implies the need to match the facility level with adequate and competent human resources to be able to deliver the quality anticipated.

Nairobi City County is determined to improve access to quality health services by reducing the disease burden and improving the health indicators including maternal health indicators by addressing the Human Resources for Health (HRH) component. The Health Sector in the County seeks to identify HRH priority areas so as to facilitate resource allocation and planning (NCC, 2016).

1.2 Statement of the Problem

According to Chankova, Muchiri & Kombe (2013), the role of the Human Resource Management function in many health care facilities in Kenya is in disarray. In Nairobi City County, this is demonstrated by the high maternal and infant mortality rate despite a high rate of accessibility to healthcare services. This is also supported by the over reliance on community health volunteers (mentor mothers) to delivery critical maternal healthcare services and whose skills are unregulated. The shortage of skilled health workers reveals challenges with recruitment, training and workforce planning. Workforce imbalances are attributed to lack of human resource planning, poor deployment practices, lack of human resource development strategy and attrition due to retirement, migration and high turnover (Ojakaa, Olango & Jarvis, 2014).

Nairobi City County has continued to face high disease burden and unfavourable maternal health outcomes which have been largely attributed to a disconnect between human resource planning and maternal health objectives (NCC, 2016). According to Taddase and Lehmann (2017), one of the challenges facing Nairobi City County health sector is the inadequate access to well trained professional health workers aggravated by the devolution model which has made human resource planning more complex.

In Nairobi City County, human resource planning has historically not been a priority whilst developing health policies in government. Emphasis is placed on the development of facilities through upgrading and expansion as well as purchase of equipment and machinery. This is illustrated by the expansion of the maternity wings at Mbagathi and Mama Lucy Kibaki Hospitals in the absence of corresponding expansion or upgrading or development of the human resource for health to match these increased capabilities. The lack of prioritization of human resources for health has caused a health workforce crisis

which has increasingly grown in prominence Nairobi and is the main constraint to strengthening county health systems (Bossert, et. al., 2007).

The efficient and effective management of human resources is an essential component of a high performing maternal healthcare unit and can influence the success or failure of maternal health outcomes (Marchington & Wilkinson, 2016). Health sector policies must be concerned with not only the planning of the workforce but also with the continual management and development of this workforce within the maternal health system (Martinez, 2018). The performance of the maternal health unit is the sum of individual performance and groups of performance in each department that comprise the unit. Matters such as inadequate staffing levels, lack of appropriate skills, poor staff attitude, low morale and weak supervision undermine the quality of maternal health services provided at Nairobi City County health facilities.

It is against this background that this study assessed human resource planning in the maternal health program in Nairobi City County as health services are determined by government policies and activities, specifically the resources available and the prioritization of the maternal health services within its health development program (Shah, 2005).

1.3 Objectives of the Study

1.3.1 General Objective

The general objective of the study was to assess human resource planning in the maternal health program in Nairobi City County so as to improve human resource productivity of the maternal health unit in the County and thereby improve service delivery.

1.3.2 Specific Objectives

The study was guided by the following specific objectives:

i. To analyze the human resource plans that exist in Nairobi City County maternal health unit.
ii. To determine the extent to which human resource plans are implemented to support maternal health outcomes in Nairobi City County.
iii. To establish the challenges of implementing human resource plans in the maternal health unit at Nairobi City County.

1.4 Research Questions

The study sought to answer the following research questions:

i. What human resource plans exist in Nairobi City County maternal health unit?
ii. To what extent are the human resource plans implemented to support maternal health outcomes in Nairobi City County?
iii. What are the challenges of implementing human resource plans in the maternal health unit in Nairobi City County?

1.5 Significance of the Study

This study was important to various stakeholders in Nairobi City County. The County Executive Committee directs the organization of the county by determining the nature of departments in all sectors which then informs the staff establishment and human resource plans. This study therefore sought to add value to the County Executive Committee and provide a case for prioritizing human resource planning in the maternal health unit. The study also provided information necessary for the Committee to achieve its statutory mandate.

The County Public Service Board serves the county through providing advice to the county on human resource planning and performance management. It is therefore the main advisory body to the county executive on matters regarding human resource management and development. This study can therefore guide the advisories given to the executive as well as the implementation of human resource planning policies in the maternal health unit.

The County Assembly Sectoral Committee on Health Services develops legislation on health services as well as representing the needs of Nairobi citizens with regard to health service delivery. This study might be of significance to the Committee especially the study on the implementation of human resource plans as it manifested the need for better legislation and expose the main pain points of Nairobi citizens in maternal health services.

The study was also valuable to policy makers in the health sector as it enabled them to make responsive decisions regarding human resource planning in maternal health services. The study also informed policy to improve service delivery and thus the achievement of maternal health outcomes.

The study might also replicate in other counties especially those in the urban setting as Nairobi City County.

1.6 Scope of the Study

The study assessed human resource planning in the maternal health program in Nairobi City County. This study only focused on human resources funded by the Nairobi City County government working in health facilities run by the County. This eliminates those funded by donor and joint venture projects which are generally term based unlike government services which are permanent and continuous.

This study adopted a mixed method approach: both quantitative and qualitative data was collected from the population under investigation who provided information regarding the variables given. The study conducted a total census of the Nairobi City County management employees whose responsibility it is to undertake the human resource planning function in the health sector specifically designing and monitoring of the human resource plans in the health facilities majoring in maternal health care.

The study also specifically sought to determine the human resource plans that exist in Nairobi City County Government, the extent to which human resource plans are implemented to support maternal health outcomes and the challenges of implementing human resource plans in Nairobi City County.

CHAPTER TWO: LITERATURE REVIEW

2.1 Introduction

This chapter discusses the literature around human resource planning and maternal health based on the specific variables given. The chapter begins with a review of the theory underpinning the research study and thereafter discusses literature regarding each specific research objective.

2.2 Theoretical Review

A theory is an abstract generalization that offers a systematic explanation about how phenomena are interrelated (Loiselle, Profetto-McGrath, Polit and Beck, 2007). The study adopted the General Systems theory (GST). General system theory illustrates the interconnectedness and interdependence of multiple systems for human resources for health (HRH) planning.

General system theory was developed by Von Bertalanffy (1968). Von Bertalanffy defined a system as a set of interacting, interrelated, or interdependent elements that work together in a particular environment to perform the functions that are required to achieve the system's aim (Von Bertalanffy, 1968). A successful health system is made up of six elements: Health Financing, Leadership and Governance, Medical Technology, Health Information, Service Delivery and Human Resources. From the perspective of human resources for health, a system may be a group of individuals (health providers and patients) who have repeated interactions to form a whole service delivery chain. This would not be limited to the care environment but may also be other inter-related components that influence the interactions between providers and patients such as health education, provider competencies and system level considerations such as funding (Hall & Fagen, 1968).

However, the understanding in Systems Theory is that no single element has an independent effect on the behaviour of the whole (Martinelli, 2001; Steele, 2003). The concept of 'system' was developed by Von Bertalanffy to address the limitations of individual disciplines trying to address complex social problems. The intent is that Systems Theory can be applied across the natural and social sciences and across several 'layers' of understanding from the micro-system through to the meso- and macro-systems (Brofenbrenner, 1979). This supports a recognition of how larger social institutions influence smaller groups of people and vice versa. For instance, how maternal health care

reform and the introduction of different service delivery models influence how maternal health needs are viewed, how care and services are organized and who provides care. Similarly, research that demonstrates how health needs can be met (e.g. through inter-professional collaboration) influences broader policy and planning (Leathard, 2003).

There are four key principles of the Systems Theory, all of which apply to this research: non-summativity, interdependence, homeostasis, and equifinality. Non-summativity is rooted in the Aristotelian philosophy that the 'whole is more than the sum of its parts'. In other words, the system as a whole has the potential to work together to create more than what might be accomplished by individual elements. This ability to achieve more through group effort than individual effort has been termed 'positive synergy' (Lasker, Weiss, & Miller, 2001). In a needs-based approach, multiple factors and stakeholders are included so that a complete 'picture' of health needs is obtained based upon a broad definition of health, which is based upon the social determinants of health (Raphael, 2004; Tomblin Murphy, 2004; 2007).

The second principle is interdependence (Laszlo & Krippner, 1998). This implies that all elements within the systems are inter-related. Interdependence improves the interactions of health providers with women and newborns (e.g. how care was provided) and women's and newborns' health needs, experiences and outcomes. This principle also recognizes the complexity of health care and the influence of the social determinants of health on health needs, experiences and outcomes (Mikkonen & Raphael, 2010).

The third principle is homeostasis, which refers to the stability of health systems. It can be either functional or dysfunctional. For instance, in a system wrought with conflict, it may be challenging to achieve the system goals. However, through feedback loops, the system will attain/maintain homeostasis and adapt to a new situation to restore balance (Ball, 1978). For instance, when human resources for health and health system planning are based upon the needs of people, then patient, provider and system outcomes are improved resulting in positive feedback to continue care based on needs (Birch et al., 2007; 2009).

The final principle is equifinality, which suggests that there are many ways to achieve the same goal. For example, different health providers often share similar competencies and scopes of practice required to provide care for particular patient populations; resulting in similar outcomes (Grol & Sibbald, 2005). There are several examples of System Theory

for planning of maternity care. Miller and colleagues (1997) used a System Theory informed mixed methods design to explore midwife-physician collaborative practice. Similarly, Sicotte, D'Amour & Morreau (2002) used an interdisciplinary collaborative service delivery model informed by systems and organizational theories to measure collaboration and factors that support or limit collaboration in Community Health Care Centres in Quebec. They found that how and who delivers health care may differ between models of service delivery, but the end result is often similar.

2.3 Assessment of Human Resource Plans

In this context, the key theoretical approach to human resource planning is derived from theories of human resource management which infer planning approaches. The Storey model, stresses extra contractual as the basis of planning in that human resource planning cannot function without the management input who are identified as key players in the human resource planning process (Bratton and Gold, 1999). When conducting a human resource planning process, there is need to develop a tool to assist in assessing and implementing the plan. Although there is no common and specific agreed planning tool that all programmes or organizations should be using, Yadav and Dabhande (2014) found out that it is difficult to assess accurate human resource planning and adopting accurate audit practices because these practices in themselves do not produce right or wrong answers, but they produce a series of alternatives from which the right course of action can be chosen.

2.3.1 Human Resource Planning and Plans

The performance of health systems is influenced significantly by the extent to which health workforce planning is done. The field of Human Resources for Health has gained immense international prominence with human resource planning, spurred by the unprecedented international migration of health professionals, being viewed as a vital activity within planning for the broader sector (Sidani & Fox, 2013). The purpose of human resource for health planning is to put in place a human resource policy and plan which spans the entire health system. Human resource planning is essential for any organization to ensure that its human resources are capable of meeting its operational objectives. Such planning ensures that an organization obtains the right quality and adequate quantity of the staff it requires; makes the optimum use of its human resources; is able to anticipate and manage surpluses and shortages of staff; and develops a multi-

skilled, representative and flexible workforce, which enables the organization to adapt rapidly to a changing operational environment (Skinner & Foureur, 2010).

Faced with the need to deliver world class standards of maternal health care by highly trained and motivated professional staff there is an emerging awareness that more Human Resource Planning in health services could improve performance both in terms of staff satisfaction, staff retention, positive patient outcomes and cost effectiveness (Dwyer & Leggat, 2012). Human Resource Planning consists of a set of functions and activities that when engaged in their totality is designed to achieve the key objectives of attracting, retaining and motivating employees (Kramar, Bartram & DeCieri, 2011).

2.3.2 Role of Human Resource Planning

According to Lee and Cummings (2008), from an organizational perspective, human resource planning and ensuing human resource plans involve strategies to retain staff and provide a stable workforce reducing the costs associated with ongoing recruitment, orientation, and training. These costs can also be measured by rates of absenteeism and its consequences in relation to patient care (Duffield *et al,* 2009). In this context a more strategic role for human resource development, particularly in relation to the training and development of maternal health practitioners at county level may be critical to improving quality of service delivery and cost effectiveness (Brinkert, 2010). Greater investment in people within the public healthcare sector is recognized as a national priority (Duffield et al, 2009). For instance, in Australia, the labour force is the largest component of health care costs, accounting for greater than 70% of total costs (Duckett, 2000). Human Resource Planning is therefore critical to the provision of high quality, cost effective health care (Kabene et al, 2006).

According to Aswathappa (2012), steps in manpower planning and development include the following aspects. Demand Forecasting: The idea of demand forecasting entails predicting and targeting. This involves a process of estimating the future quality of manpower planning and development required by an establishment. Supply Forecasting: Manpower resources comprises of the total effective effort that can be put to work as shown by the number of people available and the capacity of employees to do the work and their productivity. Supply forecasting also includes manpower planning that is slightly available from within and outside the organization having allowed for

absenteeism, internal movement, promotion, wastage and change in hours and conditions of work.

Determine Manpower Recruitment: Manpower planning is determined by relating the supply to demand forecast and establishing any deficit or surplus that will exist in the future. Manpower Productivity and Cost: Productivity is the output of goods and services which can be obtained from a given input of employees within the organization. Manpower planning and development cost on the other hand represent the overall expenditure of manpower planning which includes remuneration cost, retirement cost, training cost and personnel administration cost. Action Planning: The manpower planning should be prepared on the basis of manpower requirement and the implication of the information on productivity and cost. The main demand depending on circumstances will consist of requirement planning, redundancy plan, re-development plan, productivity plan and retention plan. Manpower Budgeting and Control: This is concerned with estimating manpower planning and development requirement in terms of numbers, skills and goals needed to accomplish a specific task within a time frame which is usually a financial year. It should also clarify responsibility for implementation and establishment of reporting procedure, monitoring against the manpower plan.

Given the relationship between effective recruitment and organizational performance, organizations need to adopt a more strategic approach to Human Resource planning before moving on to the actual recruitment and selection process (Pilbeam & Corbridge, 2014). Human Resource planning involves defining job roles and the associated competencies, as well as developing an understanding of the labour market, both internal and external, in order to match the availability of potential labour to organisational needs.

Schmidt felt that they require more manpower in the near future. The reasons include expansion plans, expected increase in sales orders from customers and technological changes that are contemplated by the units. Interestingly, about every alternative unit undertakes human resource planning for a short term using informal techniques of human resource forecasting such as instant decisions about the human resource requirement and extrapolating past trend of workforce into future (Gupta, 2013). Majority of units in an organization require more manpower in the near future. The reasons include expansion plans, expected increase in sales orders from customers and technological changes that are contemplated by the units (Dessler, 2010).

2.4 Implementation of human resource plans to support maternal health outcomes.

The Human Resource Planning for Maternal Health is focused on strategic, innovative efforts to improve maternal mortality indicators, as well as build medium and long term sustainable health worker programs to deliver preventative and lifesaving services for the next generation of mothers-to-be (Gamage, 2014). Strategic human resource planning is essentially concerned with the demand and supply of personnel and the aim to detect and resolve existing gaps.

2.4.1 Models of implementing human resource plans

To be able to implement strategic human resource planning, authors have examined the process and developed models as guidelines (Gómez-Mejía, Balkin, & Cardy, 2004; Noe Hollenbeck, Gerhart, & Wright, 2007; Armstrong, 2001; Bramham, 1989). Bramham (1989) developed a model to address the implementation of HR plans with the following phases; analysis and investigation, forecasting, planning, and implementation and control. The first phase involves an analysis of the internal and external labour market. An organisation which develops a strategy to be better at gaining benefit from market developments than competitors has become an appealing organisation to shareholders, clients and employees.

When these elements are analysed, the present supply and demand are being evaluated through forecasting techniques. This results in an imbalance of human resources and should be tackled by the application of HR tools involved with personnel planning. For example, recruitment and selection and retention should be evaluated and if necessary adjusted to the current situation. Also, training and development plays an important role just like reward. In the end, the implementation and control phase will establish the adjusted HR tools to be able to respond to the existing gap between supply and demand. It should be kept in mind that the strategic part behind the planning of human resources is mainly determined by the guidance of the management (Cappelli, 2009). The structure of Bramham is still a structure which is representative for the HRP process today.

Armstrong (2001) model shows elements of the 'hard' approach present in for example the balance between demand and supply forecasting. And it also focuses on the internal labour supply opposite to the traditional approach. Another approach to human resource planning is described by Gómez-Mejía, Balkin, & Cardy (2004), it has two phases which include; estimate labour supply and estimate labour supply resulting in one of three

conditions (labour demand exceeds labour supply, labour supply exceeds labour demand and labour demand equals labour supply). Once the two factors have been examined, one out of three conditions is faced by the organisation. In all three scenarios, advice is given on how to approach the problem. For example, in case that labour demand exceeds labour supply, training and recruitment from outside is recommended.

Planning human resources is necessary to meet future business objectives and to gain competitive advantage. To succeed in this, an internal analysis of the characteristics of the labour force is a must. Strengths and weaknesses should be mapped and the plan for the future of the organisation should be clear. Together, this will help make estimations for the size and the characteristics of the workforce. "Human resource planning compares the present state of the organisation with its goals for the future, then identifies what changes it must make in its human resources to meet those goals" (Noe, Hollenbeck, Gerhart, & Wright, 2007, p. 137). Outcomes may result in downsizing, training existing employees or hiring new personnel.

Another approach to HRP is the approach of Noe *et al.,* (2007), the approach has three stages. They include; Three stages; forecast labour demand, forecast labour and complementing stages 1 & 2 by looking at expected future changes. The first phase is based on internal and external analysis and includes details about changes in technology and trends in the composition of the workforce. The second phase is based on the existing personnel file. This file is then adjusted by looking at changes expected in the near future like retirements, promotions and voluntary turnover. Having executed the analyses, it turns out that there is a labour surplus or shortage within the organisation. This can be examined per job category. According to Noe, Hollenbeck, Gerhart, & Wright (2007) the purpose of setting specific goals is to focus on the detected problem and to provide a basis for measuring the organization's success in addressing labour shortages and surpluses. Per job category, numbers should show changes in the amount of employees present within the coming years and timetables should be linked to the made forecasts. Every goal should be linked to a corresponding strategy. Finally, the HR plan is implemented and evaluated.

2.4.2 Cases on Implementation

Innovative strategies have been implemented in many countries to rapidly scale up the health workforce, especially in the context of primary health care renewal. For instance

the Nigerian national government allocated funds for the establishment of its Midwives Service Scheme, an initiative conceived as a collaborative effort across three tiers of government supported by strategic partners for mobilizing midwives in the delivery of essential maternal, new-born and child health (MNCH) services (Ministry of Health, Nigeria, 2009). Under the scheme, midwives are trained in life-saving skills and integrated management of neonatal and childhood illnesses, and deployed to rural areas where they receive continuous support from community based development committees. As of mid-2010, some 2500 newly qualified, previously unemployed and retired midwives had been deployed to 652 primary health care facilities. There was a general consensus among stakeholders that the scheme had catalyzed renewed efforts in maternal mortality reduction and reports indicated increase in MNCH service utilization in target areas (Ministry of Health, Nigeria, 2009).

In Ethiopia the nationwide implementation of Health Extension Program (HEP) progressed in line with its target goals. In all, 40 training institutions were established, and over 30,000 Health Extension Workers were trained and deployed to approximately 15,000 villages. The potential health service coverage reached 92.1% in 2011, up from 64% in 2004. While most health indicators improved, performance in skilled delivery and postnatal care has not been satisfactory. While HEP is considered the most important institutional framework for achieving the health MDGs in Ethiopia, quality of service, utilization rate, access and referral linkage to emergency obstetric care, management, and evaluation of the program are the key challenges that need immediate attention (Singh, 2011).

In 2009, Niger's Ministry of Public Health and its regional health management office in Tahoua requested assistance from Health Care Improvement Project (HCI) to implement a program to address the health workforce crisis. With too few staff and no prospects for additional staff, the Ministry sought to improve the management of human resources in selected facilities and management offices in Tahoua Region. The predecessor project to HCI had successfully implemented quality improvement (QI) interventions in the same region. The new project aimed to build on that experience and the country's National Health Development Plan, which targets maternal/child health and human resources (Lunenburg, 2012).

HCI proposed applying the collaborative improvement approach to improve human resources management in Tahoua. HCI had adapted for use in developing countries the

collaborative improvement approach successfully implemented in the U.S., Europe, and Canada. The approach features QI teams that work at their own facilities with QI experts from HCI and the national health ministry. The teams work with the experts to learn the evidence-based interventions that will improve health outcomes. For the HR collaborative, in addition to the facility/clinical teams, teams also formed comprising managers. These management teams supported the facility teams by strengthening supervision and management. What distinguished the Niger HR collaborative from others HCI had helped implement was that no clinical interventions were proposed, only HR interventions (Lunenburg, 2012). The approach of focusing on improving the performance of health workers by better managing the elements of their performance and helping them manage themselves can improve any program and should be a part of any clinical intervention. The process and change package could be simplified and adapted for different contexts. Niger's experience of having health workers become invested in outcomes, communities more aware of available services, and the process of work improved to better serve women and children should be replicated elsewhere (Ghazala & Habib, 2012).

In Indonesia, the presence of a skilled attendant at birth increased dramatically between 1996 and 1999; however, the use of life-saving EmOC fell during the same period. Potential reasons for this are lack of responsive referral systems (e.g., transport), low cultural acceptability and the high out-of-pocket cost of EmOC services (Ronsmans *et al.*, 2011). In contrast, in the Maternity Care Program in Matlab, Bangladesh, a significant decline in maternal mortality took place in the intervention area where the number of skilled attendants increased, together with development of a referral chain and basic essential obstetric care (BEOC) facilities. This decline was not found in the control area; however, similar gains in maternal mortality reduction occurred in a comparison area that had not benefited from the intervention, but did have access to a facility providing comprehensive essential obstetric care (CEOC) (Pathmanathan *et al.*, 2013).

In Malaysia and Sri Lanka in the 1950s, the simultaneous improvement in underserved areas of roads, water and sanitation, and schooling, especially for girls and women, were the three key ingredients that accompanied the increased access to skilled birth attendance (Sibley & Sipe, 2014). Today, this would be called a poverty reduction strategy. It was successful, building on two pre-existing cornerstones: the formal recognition of midwifery, and the existence of civil registration of births and deaths.

According to Kenya demographic health survey (2012) it's estimated that about 43% of births in Kenya are delivered under the supervision of skilled birth attendant, TBA continues to assist 28% of the births, 22% are home deliveries assisted by friends and relatives while 7% of expectant mothers deliver without assistance. Kenyan women have long suffered from high maternal mortality and morbidity for many years and utilization of antenatal and maternal services is an essential health indicator and step to the right direction, increasing the proportion of mothers who are cared for in health facilities during pregnancy, delivery and post-delivery reduces health risk to both the mother and the child. In most communities motherhood is often celebrated as a positive gain in the community and fulfilling experience for the concerned couple/ family where its seen as the continuation of family lineage while at the same time for many women it is associated with suffering, pain ill-health and even death associated with hemorrhage, infection, high blood pressure, unsafe abortion, and obstructed labour.

2.5 Challenges of implementing human resource plans

Human resource planning is faced with a series of difficulties which result into challenges that planners face. Among the main challenges are: Forecasting the macro environment of the county, gathering information about the workforce in each institution, accurate information and analysis on personnel costs, information about the labor laws and regulations, the existing personnel policies of each institution, the capacity to understand the new job competencies needed and develop new staff roles and training for employees, mechanisms for improving organizational and employee performance and improvement in work processes, information about performance-based contracts and incentives and capacity to develop the necessary systems, change management process and Performance management and supervision systems (Wright, 2015).

The dynamic nature of the environment of corporate planning particularly with respect to human resource planning creates major difficulties in predicting the future state of affairs. The result is that human resource planning horizon is increasingly getting shorter and is less accurate than years before. Planners must increasingly develop flexible planning scenarios leading to contingent plans (Kaufmann & Miller, 2011).

The roles, functions and strategies of organizations and institutions often change in the process of health sector reform. This cascades down into new roles and functions for departments and other administrative and technical units, teams and individual employees

in organizations and institutions in the sector. New structures, processes, procedures, skills and knowledge may be needed hence the need to retrain. Performance improvement does not automatically occur as a result of establishing new policies and new core roles and functions of institutions within the sector. Managers must create an infrastructure for continuous performance improvement in each organization. They must use an appropriate set of methods, procedures and strategies that consider the institutional context, analyze current performance and desired performance, look into underlying causes of performance gaps, design, select and implement appropriate interventions and evaluate change in performance (Kazan, 2015).

Health sector reform implies changes which impact people who work at all levels in the health system. Institutions and people must be prepared for change and managers, leaders and HR professional must be capable of managing change. These changes may include re-profiling jobs or new organizational structures in which people are thrust into new decision-making and supervisory roles. They may involve new work teams or cutting or limiting hiring of public sector employees. People contracted through traditional public sector system mechanisms may find themselves working alongside contracted workers. Work processes norms and procedures may change requiring people to learn new ways of doing things. Such change may be viewed as threatening. Employees may or may not be in agreement about the need for and direction of change. The changes may result at least temporarily in worry, fear and insecurity among the workforce, breakdown in employee morale and a decline in productivity (Menguc & Auh, 2010).

Tensions may arise among public sector leaders, employees with unions concerned that their jobs may be eliminated or outsourced. Individual and team performance must be supported in many ways including performance reviews, supervision, coaching and mentoring, job aids and staff development. A sound well-functioning HRM department and system supports health sector reform processes by having the capacity to respond to the above. Without the requisite HRM capacity, the reforms may be stymied. Many employers resist human resource planning because they think that it increases cost of manpower as trade unions demand for employee based plans, more facilities and benefits including training and development. Further, employers feel that human resource planning is not necessary as candidates are/will be available throughout the year because of unemployment cases in third world countries (Boxall & Purcell, 2011). Trade unions and employees also resist human resource planning because they view that it increases the

work load of employees and prepares programme for securing the human resources mostly from outside. The other reason for their resistance is that HRP aims at controlling the employee's thorough productivity maximization (Kazan, 2015).

2.7 Empirical Review

Gupta and Maliq (2011) did a study on human resources for maternal, newborn and child health: from measurement and planning to performance for improved health outcomes. The study focused on health workforce density and situation in 68 low- and middle-income countries. The study collected and analysed cross-nationally comparable data on human resources for health (HRH) availability, distribution, roles and functions from new and existing sources, and information from country reviews of HRH interventions that are associated with positive impacts on health services delivery and population health outcomes. Findings from 68 countries demonstrated availability of doctors, nurses and midwives was positively correlated with coverage of skilled birth attendance. Most (78%) of the target countries faced acute shortages of highly skilled health personnel, and large variations persist within and across countries in workforce distribution, skills mix and skills utilization. Too few countries appropriately planned for, authorize and support nurses, midwives and community health workers to deliver essential maternal, newborn and child health-care interventions that could save lives.

Thatte and Choi (2015) evaluated whether human resource management improves family planning service quality. Analysis from the Kenya Service Provision Assessment 2010. The purpose of this study was to assess the relationship between HR management and family planning (FP) service quality. Data came from the 2010 Kenya Service Provision Assessment, a nationally representative health facility assessment. In total, 912 FP consultations from 301 facilities were analysed. Four indices were created to measure quality on reproductive history taking, physical examination, sexually transmitted infections prevention and pill/injectable specific counselling. HR management variables included training in the past year, any and supportive (i.e. with feedback, technical updates and discussion) in-person supervision in the past 6 months and having a written job description. The study found that the level of service quality ranged from 16 to 53 out of a maximum score of 100 across the indices. Fifty-two per cent of consultations were done by providers who received supportive in-person supervision in the previous 6 months. In 23% and 38% of consultations, the provider was trained in the past year and had a written job description, respectively. Multivariate analyses indicated that having a

written job description was associated with higher service quality in history taking, physical examination and the pill/injectable specific counselling. Other HR management variables were not significantly associated with service quality.

Fujita, Abe and Rotem (2013) did a study addressing the human resources crisis: a case study of Cambodia's efforts to reduce maternal mortality. The objective of the study to identify factors that have contributed to the systematic development of the Cambodian human resources for health (HRH) system with a focus on midwifery services in response to high maternal mortality in fragile resource-constrained countries. The study was qualitative in nature. Three rounds of interviews were conducted with senior and mid-level managers of the Ministries of Health (MoH) and Education, educational institutes and development partners. The study found that incremental development of the Cambodian HRH system since 2005 focused on the production, deployment and retention of midwives in rural areas as part of a systematic strategy to reduce maternal mortality. The improved availability and access to midwifery services contributed to significant MMR reduction. Other contributing factors included improved mechanisms for decision-making and implementation; political commitment backed up with necessary resources; leadership from the top along with a growing capacity of mid-level managers; increased MoH capacity to plan and coordinate; and supportive development partners in the context of a conducive external environment.

Chilvers (2014) did a study on planning framework for human resources for health for maternal and newborn care. The study reviewed the literature for strengths and limitations for current HRH planning and outline, the main components of an evidence-informed MNH-HRH planning framework with relevance to subnational contexts and MNH systems, translate the main components into a working prototype as a spreadsheet-based model, estimated and MNH-HRH requirements and supply for each occupation and applied the MNH-HRH planning model in three countries from low to high income contexts and critique the implications for future research and development in this field. Following the construction of a new planning framework, a working prototype called the 'MNH.HRH Planning App' was developed. The spreadsheet-based model was applied using secondary data sources to England, Bangladesh, and Ethiopia which had varied health systems, levels of spatial disaggregation and HRH structures for MNH care. The thesis concluded by highlighting the implications of the new planning framework for the future development of a web-based MNH.HRH Planning App, potential for engaging

policy-makers for evidence-informed planning and contributes to the wider discourse on the use of quantitative projection models for planning the future human resources for healthcare.

2.8 Analytic Framework

The analytic framework is a diagrammatic representation of the variables under assessment. The variables are: (1) assessment of the existing human resource plans in Nairobi City County; (2) the extent of implementation of human resource plans to support maternal healthcare in Nairobi City County; and (3) the challenges in implementing human resource plans in the maternal health program in Nairobi City County.

The first variable is determined by the existence of an organizational chart and staff establishment showing the in post staff, the optimal number of staff and the variations. It is also determined by a training needs assessment, succession management plan and budgeting for human resources. The second variable is determined by retention of staff in the maternal health unit, the staff turnover, improvement in turnaround time and cost reduction associated with proper implementation of human resource plans. The third variable is determined by information on human resource planning, the cost of human resource planning, the change expected and leadership support in human resource planning activities and the infrastructure required to support human resource planning.

The area of analysis is maternal health outcomes in Nairobi City County. They are determined by 11 indicators as set out by WHO: (1) Maternal mortality ratio; (2) Under-five child mortality, with the proportion of newborn deaths; (3) Children under five who are stunted; (4) Proportion of demand for family planning satisfied (met need for contraception); (5) Antenatal care coverage (at least four times during pregnancy); (6) Antiretroviral (ARV) prophylaxis among HIV positive pregnant women to prevent HIV transmission and antiretroviral therapy for pregnant women who are treatment-eligible; (7) Skilled attendant at birth; (8) Postnatal care for mothers and babies within two days of birth; (9) Exclusive breastfeeding for six months (0–5 months); (10) Three doses of combined diphtheria-tetanuspertussis (DTP3) immunization coverage (12–23 months); (11) Antibiotic treatment for suspected pneumonia.

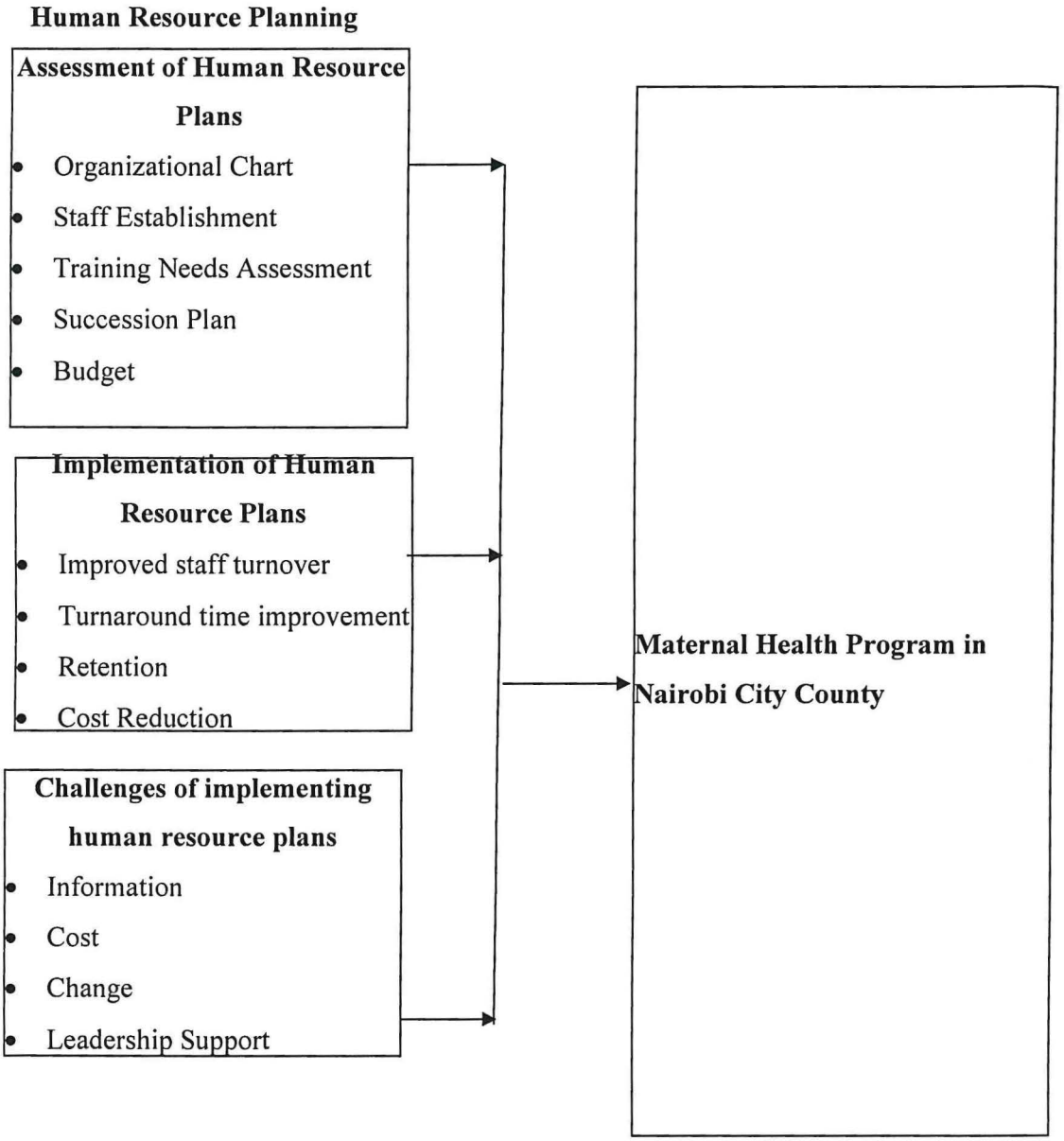

Figure 2.1: Analytic Framework

2.10 Research Gap

Health workforce planning has historically not been a policy priority in developing countries and where it has taken place, it is focused on inputs and outputs with emphasis on pre-service education of health workers and ratios of health workers to target populations. Whilst these factors are important, they are only few components of the larger human resource for health management system thus a comprehensive approach to designing health workforce planning is warranted (Bossert, et. al., 2007). This is because

cross cutting problems occur across the HRH spectrum such as attractiveness of health professions, multiple job holding and low motivation. This explains the approach by this study to adopt the systems theory to assess human resource planning as one element of six that influence maternal health outcomes in the maternal health program in Nairobi City County.

This section has reviewed a considerable number of studies related to human resource planning on maternal health outcomes. The analytic framework has shown the inferred relationship between the study variables. The aim of this study thus is to fill the information gap in human resource planning specifically in the maternal health program in Nairobi City County by analyzing the elements given under each specific objective. The overall aim will that the study will increase productivity, enhance service delivery and strengthen the overall maternal health system.

CHAPTER THREE: RESEARCH METHODOLOGY

3.1 Introduction

The research methodology explains the procedure the research applied in studying the relationship between the variables as specified in the research objectives. This chapter covers the research design which outlines the set of activities which were carried out in undertaking the research, the target population and the justification for their selection, the data collection instrument, data collection methods describing how data was collected, data analysis specifically the information processing section and presentation and ethical considerations.

3.2 Research Design

Research design provides the synthesis factor of a research project. It is used to structure the research, to show how all of the major parts of the research, the groups, measures, treatments or programs, and methods of assignment work together to try to address the central research questions (Creswell, 2014). It outlines what steps are needed to undertake the research.

This study adopted a mixed method approach that is both quantitative and qualitative research design, specifically a descriptive survey. The advantage of using the mixed method was that the analysis of the quantitative data was not biased and the qualitative data provided in-depth information which could not be given by quantitative analysis. According to Cooper and Schindler (2003), a descriptive research methodology is a way of finding out the what, where and how of a phenomenon in this case an assessment of human resource planning in the maternal health program in Nairobi City County. The survey is a method for collecting information or data as reported by individuals and is useful in establishing the current state of affairs in the given area of survey (Orodho, 2009).

The main idea behind using this type of research design was to simplify the acquisition of an opinion, attitude, or behaviour held by the group of people on the study subject (Kothari & Garg, 2013). This meant that the group of management level officers in the county would be surveyed to opine on human resource planning in their areas of control and how the plans or lack thereof influence maternal health outcomes in Nairobi City County.

The study conducted a total census of the Nairobi City County management employees whose responsibility is to undertake the human resource planning function in the health sector specifically those designing and monitoring of the human resource plans in the health facilities majoring in maternal health care. This involved identifying the job functions within the health sector mandated to make decisions on human resource planning. They included the County Secretary and Head of Public Service, the Chief Officer Health Services, the County Director of Medical Services, Members of the County Health Management Team, the Medical Superintendents of Mama Lucy Kibaki Hospital, Pumwani Maternity Hospital and Mbagathi Sub County Hospital and Heads of sections in maternal health programmes in the facilities.

Two structured questionnaires (Appendix III and IV) were used, one targeting the policy makers in the sector which contained background demographic information in order to assess bias and credibility of information provided. The questionnaire also contained qualitative and quantitative questions on the specific objectives of the study. More qualitative questions appeared in the questionnaire because the group being policy makers, have more in depth information regarding human resource planning. The second questionnaire targeted the management officers who monitor the implementation of the human resource plans. The questionnaires contained demographic questions such as age, level of education and gender. Other questions such as the facility and length of service were also be asked to assess the level of exposure to maternal health care. The rest of the questionnaire focused on the specific objectives stated herein before.

3.3 Target Population and Sample Size

According to Mugenda (2009) a target population is a complete set of individuals, cases, or objects with some common observable characteristics. Thus, the target population defines those units for which the findings of the survey are meant to generalize. Target populations must be specifically defined, as the definition determines whether they are eligible or ineligible for the survey.

The study conducted a total census of the Nairobi City County management employees whose responsibility is to undertake the human resource planning function specifically designing and monitoring implementation of the human resource plans in the health facilities majoring in maternal health care.

The study was conducted in three level four health facilities in Nairobi County specifically Mama Lucy Kibaki Hospital, Pumwani Maternity Hospital and Mbagathi Sub County Hospital. This was justified by the fact that these facilities provide comprehensive maternal care services thus able to determine and control maternal health outcomes. The study was also conducted at City Hall where the health sector administrative unit is situated. The target population was the management employees in the health facilities and at the headquarters who are charged with human resource planning in the health sector. Therefore, the study population was approximately 47 employees.

3.4 Data Collection methods

Primary data was collected using a questionnaire. A questionnaire is a research instrument consisting of a series of questions for the purpose of gathering information from respondents (Cooper & Schindler, 2014). The questionnaire had both open ended and close-ended questions and was structured according to the study objectives. Likert scale questionnaires were used. Likert Scale is a psychometric scale where questions based on this scale are normally used in a study. Likert scale survey questions are essential in measuring a respondent's opinion or attitude towards a given subject (Creswell, 2014). The questionnaires were administered to the management employees.

The questionnaires were administered by the researcher with the help of two trained and well experienced research assistants of diploma and graduate level of education. The research assistants were involved since data was to be collected in various health facilities located in different areas in Nairobi County. This facilitated easy and speedy data collection thus alleviating time constraints. Questionnaires were used because they are relatively easy to analyse, a large number of the given population could be contacted at relatively low cost, were simple to administer and they were simple and quick for the respondent to complete.

The researcher first informed the Chief Officer Health Services of the intention to collect data from health facilities in the County. Thereafter a preliminary meeting with the research assistants was held to discuss the appropriate dates to disseminate and collect the data collection tool as well as discuss the expectations and timelines. The researcher then informed the Health Administrative Officer of the agreed dates in advance in order to ensure availability of the respondents.

On the dissemination day, the researcher met with the research assistants, allocated them facilities and issued them with the questionnaires and the list of the persons to fill the questionnaires. The dissemination took three days to accommodate those who were not available on the specific dates. The questionnaires were collected within the said two days and returned to the researcher for analysis.

Upon completion of analysis, a feedback meeting was scheduled and held with the policy makers and management team to disseminate the results of the study.

3.5 Data Reliability

According to Mugenda and Mugenda (2008) reliability is a measure of the degree to which research instruments yields consistent results or data after repeated Trials. Silverman (1993) outlined a number of ways that reliability can be achieved in qualitative research: pre-testing interview protocols and questions; using fixed-choice responses; and systematically collecting, transcribing and reporting field notes and transcripts for others to review as necessary.

The research instruments were analyzed by a statistician and health administrator in the Health Sector to assess their veracity and appropriateness. This formed part of the pre-testing interview protocols that enhanced the reliability of the tools.

3.6 Data Analysis

Data analysis in this study was in two stages. The first phase was to inspect the data using descriptive statistics such as frequency distribution, percentages, the mean and standard deviation. The information was displayed by use of tables, bar charts, graphs and pie charts and in prose-form for ease of interpretation. These descriptive statistics were useful in summary and variable analysis. They also gave a clearer picture of the distribution of data and a general impression of values that could not be seen as common, middling or average (Saunders *et al.*, 2003).

The second phase of analysis of the data collected from the questionnaires was to check for completeness and accuracy of the questionnaire. Thereafter the questionnaire was coded using SPSS version 23 according to each variable of the study to ensure the margin of error minimized and assure accuracy during analysis. Prior to performing statistical analysis, the researcher examined the data collected for possible errors. Hair *et al.*, (2006) identify four issues that need to be addressed in preparing and cleaning data for analysis namely: coding of data, accommodation of missing data, the assurance of meeting the

underlying statistical assumptions, and identifying outliers that might disproportionately affect the results.

For the quantitative data entry for this study, the researcher followed the advice given by Saunders *et al.*, (2003) that all data types, with few exceptions should be entered using numeric codes. This enabled quick data entry with minimization of errors and made subsequent analyses more straightforward (Mumbo, 2011).

3.7 Ethical Considerations

To ensure that this study observed ethics, approval to conduct the study was sought from Strathmore University through the Ethical Review Committee prior to commencement of the study. Further the study was approved by the National Commission on Science, Technology and Innovation (NACOSTI). During the collection of data, respondents were informed of the objectives, goals and purpose of study verbally and through the Introduction Letter (Appendix I) as well as the Participant Information and Consent Form (Appendix II). It was made clear that participation in the study is voluntary. The confidentiality and anonymity of the respondent's information was ensured by restricting access to respondent identification and restricting access to the questionnaires where respondents were identified. The information obtained was purely used for academic purposes. Permission was also sort from Nairobi City County Health Services Sector to allow for issuance of questionnaires and perusal of records.

CHAPTER FOUR: FINDINGS OF THE STUDY

4.1 Introduction

This chapter discusses data analysis, presentation, interpretation and findings based on the collected data. Specifically, it covers the general information of the respondents and the findings based on the objectives of the study. Descriptive statistics were used to discuss the findings.

4.2 Response Rate

The study used a census of 47 respondents and they were all issued with questionnaires but only 34 were received back, forming a response rate of 72.3%. The rate of response was considered excellent and suitable to make inference on the study population because according to Mugenda and Mugenda (2003), a rate of response of 50% is considered to be adequate for analysis and reporting, while a rate of 60% is considered to be good and that of 70% and above is considered to be excellent. In this study our response rate was above 70% and was therefore considered to be excellent.

Table 4.1: Response Rate

Category	Frequency	Percent
Response	34	72.3
Non-Response	13	27.7
Total	**47**	**100.0**

4.3 Reliability Analysis

Reliability analysis was done to determine the reliability of the questionnaire. The study used the Cronbach's Alpha. Gliem and Gliem (2003) established the Alpha value threshold at 0.7, thus forming a benchmark for the study. The Cronbach's alpha was used to determine the reliability of each objective.

The findings as shown in Table 4.2 indicate that Assessment of Human Resource Plans, has an alpha of 0.745, Implementation of Human Resource Plans has an alpha of 0.773, Challenges of implementing human resource plans has an alpha of 0.802, and Maternal

health outcomes has an alpha of 0.791. The results on reliability indicate that the Cronbach reliability alpha of all the questions was greater than 0.7 and hence there was no need to change the measures and indicators in the questions; they were all reliable.

Table 4.2: Reliability analysis

Scale	Cronbach's Alpha
Assessment of Human Resource Plans	0.745
Implementation of Human Resource Plans	0.773
Challenges of implementing human resource plans	0.802
Maternal health outcomes	0.791

4.4 Demographic Information

The study sought to determine the demographic information of management employees in the health facilities and at the headquarters who are charged with human resource planning in the health sector. The study specifically obtained information regarding their age, gender, level of education, facility level which they work and the length of time they have served in the health facility.

4.4.1 Age of the Respondents

Respondents provided the age bracket in which their ages fall in. The results obtained were as presented in Figure 4.1.

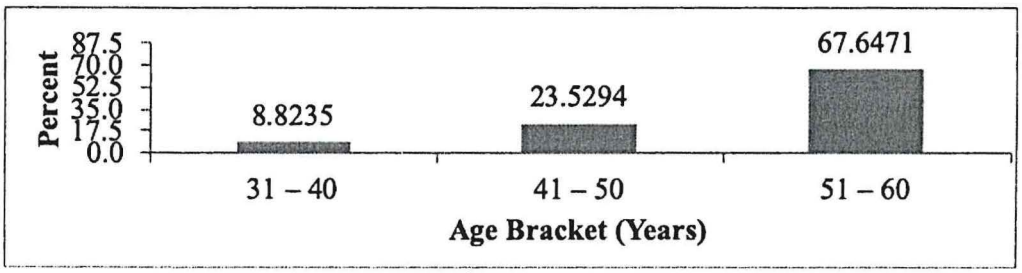

Figure 4.1: Age of the Respondents

From the findings, 67.6% of the respondents were aged 51 to 60 years, 23.5% were aged 41 to 50 years and 8.8% were aged 31 to 40 years. This was an indication that majority (67.6%) of management employees in the health facilities are aged and approaching

retirement. There are no young personnel at management positions in the health facilities in charge of maternal health care.

4.4.2 Gender of the Respondents

Respondents indicated the gender they belonged in and the results were as presented in Figure 4.2.

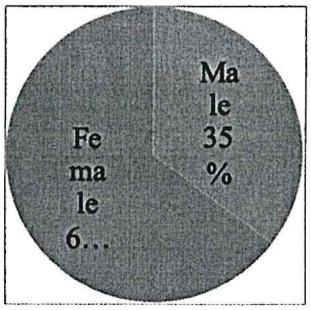

Figure 4.2: Gender of the Respondents

From the findings, majority (65%) of the respondents were female while 35% were male. The findings show that the study was not gender biased because respondents of both genders were fairly represented in the study. This is an indication that majority of health care management employees majoring in maternal health care in Nairobi County are female.

4.4.3 Respondents Highest Level of Education

Respondents were asked to indicate their highest level of education and the results were as shown in Figure 4.3.

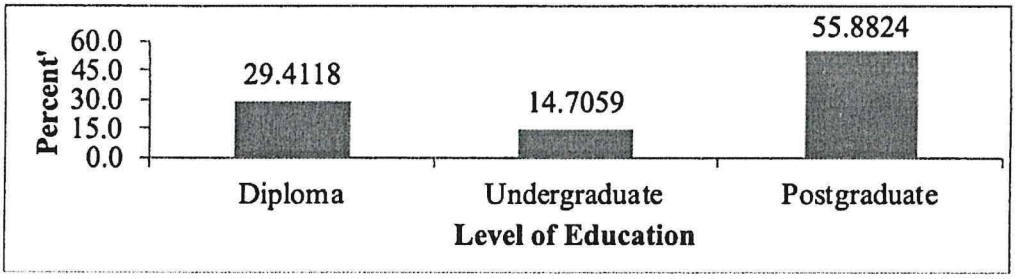

Figure 4.3: Respondents Highest Level of Education

From the findings, 55.9% of the respondents indicated that their highest level of education was postgraduate, 29.4% indicated diploma and 14.7% indicated undergraduate. This was an indication that the respondents used in the study had acquired needed skills at various educational level for the different positions they held in the health

care. The respondents had attained different educational levels with majority (55.9%) having attained postgraduate.

4.4.4 Respondents Work Facility

Respondents were asked to indicate the facility level in which they worked in. The results were as shown in Figure 4.4.

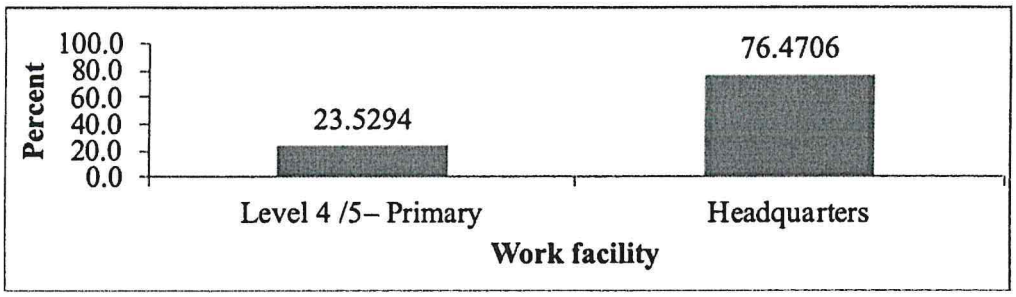

Figure 4.4: Respondents Work Facility

From the findings, 76.5% of the respondents indicated that headquarters was the facility level which they worked in and 23.5% indicated that their work facility was level 5 and others level 4-Primary. This was an indication that the respondents used in the study were from different facility levels and therefore the study was able to collect their opinion from the perspective of their different organizational levels. Majority of the respondents were from headquarters.

4.4.5 Respondents Length of Service in the Facility

Respondents were asked to indicate the length of time in which they have served in the facility. The results were as shown in Figure 4.5.

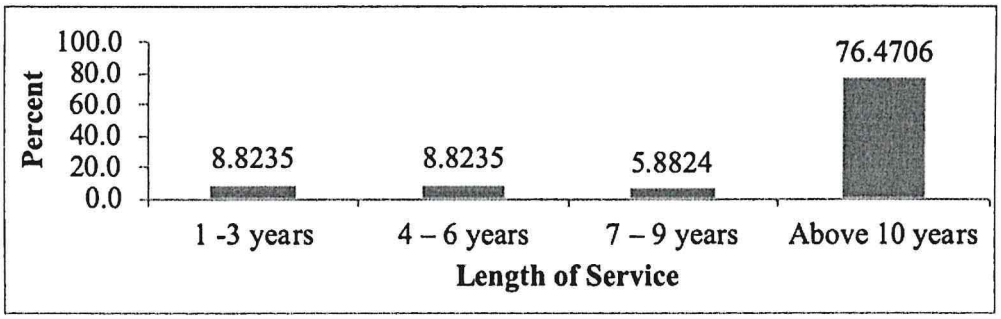

Figure 4.5: Respondents Length of Service in the Facility

From the findings, 76.5% of the respondents had served in their facilities for above 10 years, 8.8% for a period of 1 to 3 years, another 8.8% for 4 to 6 years and 5.6% for 7 to 9 years. This showed that the respondents had worked in the facility for long period of time

and therefore had the information needed in the study. Majority (76.5%) of the respondents had served in the organization for more than 10 years.

4.5 Descriptive Statistics

In this section the study presents the results of the respondents on various aspects of assessment of human resource planning in the maternal health program in Nairobi City County. The respondents gave their level of agreement or disagreement with the statements using a 5-point Likert scale, where: Scale 1- strongly disagrees, 2 – disagree, 3- moderate, 4- agree, 5- strongly agree. The results were interpreted using mean and standard deviations. The mean values of 0-1.45 suggested strongly disagree, 1.5-2.45 meant disagree, 2.5-3.45 was neutral, 3.5-4.45 suggested they agreed, and 4.5 to 5.0 was strongly agree.

4.5.1 Human Resource Plans That Exists in the Health Sector

Respondents gave their level of agreement or disagreement with statements on human resource plans that exists in Nairobi City County Health Sector. The results were as presented in Table 4.3.

Table 4.3: Human Resource Plans That Exists In Nairobi City County Health

	N	Min.	Max.	Mean	Std. Deviation
Organizational Chart/Organogram	34	2.00	5.00	3.4706	1.1074
The job requirements and descriptions	34	3.00	5.00	3.8235	.7165
The staff establishment.	34	2.00	5.00	3.0000	.8876
The staff establishment of maternal health programmes in the facility is at variance (positive or negative) with the optimal levels.	34	2.00	5.00	3.6765	.8428

The sector has budgeted for training and recruitment to bridge variances in the staff establishment for maternal healthcare.	34	2.00	5.00	3.1765	1.11384
The sector has a functional training committee for maternal healthcare.	34	1.00	5.00	3.2647	1.2384
I often participate and contribute to the sector training committee.	34	1.00	5.00	3.4706	1.4819
The sector training committee has developed a training needs assessment based on the skills gap in the maternal health program in the facility.	34	1.00	5.00	3.0588	1.1265
I am aware of the number of maternal health officers retiring each year.	34	1.00	5.00	3.1176	1.4091
There is a succession plan for maternal health care in the facility.	34	1.00	4.00	2.6471	.8486
The sector has budgeted for replacement of the skills of retiring staff in the 3 year rolling budget (MTEF).	34	1.00	5.00	3.0294	1.2181

From the findings, the respondents were in agreement that the job requirements and descriptions of each position in the maternal health programmes are clear as shown by a mean of 3.8235, the staff establishment of maternal health programmes in the facility are at variance (positive or negative) with the optimal levels as shown by a mean of 3.6765, they often participate and contribute to the sector training committee as shown by a mean

of 3.4706, and that the maternal health programme in the facility has an Organizational Chart/Organogram as shown by a mean of 3.4706.

The findings also showed neutral opinions from the respondents on the sector has a functional training committee for maternal healthcare as shown by a mean of 3.2647, the sector has budgeted for training and recruitment to bridge variances in the staff establishment for maternal healthcare as shown by a mean of 3.1765, they are aware of the number of maternal health officers retiring each year as shown by a mean of 3.1176, the sector training committee has developed a training needs assessment based on the skills gap in the maternal health program in the facility as shown by a mean of 3.0588, the sector has budgeted for replacement of the skills of retiring staff in the 3 year rolling budget (MTEF) as shown by a mean of 3.0294 and that the staff establishment of maternal health programmes in the facility is at an optimal level as shown by a mean of 3.0000. The study further the respondents disagreed that there is a succession plan for maternal health care in the facility as shown by a mean of 2.6471.

The respondents were asked to indicate the human resource plans that exist in Nairobi City County Health Sector which relate to maternal health. The respondents gave various plans. The indicated that HR is planning recruitment and selection; staff promotions; staff development; salary and rewards and are planning for succession planning and to ensure of its implementation they have factored it in the annual work plans. The respondents also indicated that there are plans to recruit more staff in 2019/20 and this is in efforts to increase the number of nurses in the opening facilities and the ones already existing.

Policy makers also indicated that the county government is ensuring that placement of staff in the maternal health is informed by skill and experience. They also have standing staffing norms guiding placement of staff and for training/capacity building of staff in maternal health unit. They have also plans to partner with donor partners for support where staffing gaps may not be met by the county.

The county government has also budgeted for maternal health care and the budget is meant to cover for reproductive health training for clinical officers and employment of more clinical officers; establishment of special clinics to cater for non-communicable diseases like diabetics and hypertension and other comprehensive care clinics.

Respondents were asked to indicate the way human resource planning for maternal healthcare is done in the county health sector. The respondents indicated that it is

generalized under all other cadres. Others indicated that it is based on the workload especially the number accessing maternal care compared to staff caring for them. Planning is also done with the consideration of staffing needs and the health care managers protect those maternal health care needs. Other respondents also indicated that HR planning is done by staffing needs from SCHMT's and HMT's and forwarded to CHMT for consideration and approval and then prepared for approval by CPSB if need be.

The county has also appointed focal persons charged with different programs at county level who also conduct the same in sub counties for effective service deliver. There are established units in the sector that cater for maternal health care who plan with other units under the guidance of the director, chief officer and the CECM. They also indicated that the county involves those in maternal unit who are mainly staff trained in midwifery, nurses, and clinicians trained in reproductive health. Another method is through skill audit depending on the gaps identified during supervision during review of reports and service delivery quality audits, through the relevant technical working groups and management team at both levels and this is done in a well-planned and organized manner.

4.5.2 The extent to which Human Resource Plans are implemented to support maternal health.

Respondents indicated their level of agreement on statements about the extent to which human resource plans are implemented to support maternal health outcomes in Nairobi City County. The results are presented in Table 4.4.

Table 4.4: Extent to Which Human Resource Plans Are Implemented

	N	Min.	Max.	Mean	Std. Deviation
The organizational chart/organogram in the maternal health program is fully utilized in the sector.	34	2.00	5.00	3.0294	.83431
Recruitment and training of maternal health workers are being conducted based on the established job requirements and descriptions for each position.	34	1.00	5.00	3.1176	1.22511
Recruitment and training of maternal health workers is in line with the approved structure.	34	2.00	5.00	3.0882	1.08342
Training needs assessment informs the training of maternal health workers.	34	1.00	5.00	3.3824	1.04489
At least 4 seminars and workshops are held to improve knowledge on maternal health care every year.	34	1.00	5.00	3.8529	1.10460
All Retiring maternal health workers are assigned a mentee to train every year.	34	1.00	5.00	2.6471	1.27641
Maternal Health care professionals are assigned tasks which they are qualified for.	34	1.00	5.00	3.7059	1.16851
Staff in the maternal health programs often resign	34	1.00	4.00	2.0294	.90404
There is high staff turnover in maternal health programs.	34	1.00	4.00	2.3529	1.01152
If human resource plans are fully implemented there will be cost reduction in delivering maternal healthcare.	34	2.00	5.00	4.1765	.90355
When human resource plans are implemented the service delivery turnaround time improves.	34	4.00	5.00	4.6765	.47486

The respondents were in agreement that when human resource plans are implemented the service delivery turnaround time improves as shown by a mean of 4.6765, if human resource plans are fully implemented there will be cost reduction in delivering maternal healthcare as shown by a mean of 4.1765, at least 4 seminars and workshops are held to improve knowledge on maternal health care every year as shown by a mean of 3.8529, and Maternal Health care professionals are assigned tasks which they are qualified for as shown by a mean of 3.7059.The study also found that the respondents help neutral opinions that training needs assessment informs the training of maternal health workers as shown by a mean of 3.3824, recruitment and training of maternal health workers are being conducted based on the established job requirements and descriptions for each position as shown by a mean of 3.1176, recruitment and training of maternal health workers is in line with the approved structure as shown by a mean of 3.0882, and the organizational chart/organogram in the maternal health program is fully utilized in the sector as shown by a mean of 3.0294. The findings also established that the respondents were in disagreement that all retiring maternal health workers are assigned a mentee to train every year as shown by a mean of 2.6471, there is high staff turnover in maternal health programs as shown by a mean of 2.3529, and that staff in the maternal health programs often resign as shown by a mean of 2.0294.

Respondents were asked to indicate the way human resource plans in the sector are implemented to support maternal healthcare services. The respondents indicated that the HR plans are done at the county headquarters but management teams from the two levels i.e. county and Sub County are involved. During the recruitment plans there is inter-sectorial involvement and the employed staffs are posted where there is need, transferred or reorganized based on needs and qualification. Human resource also prioritizes training based on skill audit; they release officers for training to bridge skills gaps and mentor new staff using older staff as a form of succession planning.

The respondents also indicated that each cadre follows the scheme of service and approved guidelines. There is also the formation of TWGs with clear terms of reference to support implementation process. HR plans in the health sector are implemented by recruitment of skilled staff, timely payment of salaries, and facilitating career development for employees. Another way was through identification of staffing gaps for placement and recruitment; regular training for update on new developments and by preparing annual work plan.

Respondents were asked to indicate the extent to which succession plan in the sector has been implemented to support maternal healthcare and provide an explanation for their opinion. The respondents indicated that succession planning has been implemented in the sector but the implementation is not well done yet/fully implemented. They indicated that each section in the sector is trying to ensure succession planning is well implemented by applying mentorship programs and transfer of skills from older staff (experienced) to younger/new staff. Also they have structured staffing norms at the program from county based office to the facilities.

The respondents indicated that the sector has poor succession planning because there is huge number of aging workforce not matched with recruitment of young staff. The institutions are trying to mitigate the issue having capacity building on the same and through coaching and training to ensure that there is flow in succession planning in that if an officer leaves there is someone who can fill in their position.

The respondents also indicated that succession planning in the sector is work in progress but still facing the challenge of insufficient staff. They indicated that the county is trying to mitigate the challenge by having a 5-year retirement projection of staff to make sure proper training, recruitment and mentorship is conducted

Respondents were asked to comment about staff turnover in the maternal health program. The respondents indicated that there is frequent turnover witnessed in the sector because of several factors. Some of the factors were that staffs were redistributed to fill gaps or shortages; young energetic officers leave their service for better opportunities in the private sector and self-employment; and retirement of aged employees and change of duties.

The respondents indicated that the high rate of employee turnover in the sector is because there are no specific staff assigned to only handle this program at the facility level except at the headquarters(county) an therefor the need of the employees are not fully met leading to employee dissatisfaction. The respondents further indicated that the issue of high employee turnover can be mitigated by having continuous training of staff to equip them with knowledge and skills to implement maternal health programs with ease giving them job satisfaction and therefore prevents high staff turnover and encourage specialization.

Respondents were also asked to comment about the turnaround times of service delivery in the maternal healthcare unit. The respondents indicated that turnaround times for service delivery are affected by low HR numbers and this makes it slow. They also indicated that it is improving with the increase in number of nursing staff and that it can be improved further by having staff with better knowledge and skills to carry out procedures with ease and within short period of time and this will in turn solve the issue of long waiting due to inadequate staff serving many clients in the facility. The respondents also indicated that it can be responsive by involving organizations in all cadres. This will ensure that service delivery is reliable and timely.

4.5.3 Challenges of Implementing Human Resource Plans

Respondents indicated their level of agreement on statements about the challenges of implementing human resource plans in Nairobi City County. The results were as shown in Table 4.5.

Table 4.5: Challenges of Implementing Human Resource Plans

	N	Min.	Max.	Mean	Std. Deviation
The maternal healthcare organizational chart/organogram in the sector is easy to implement.	34	1.00	5.00	2.9706	1.14111
It is not difficult to match function to the skills and numbers of staff needed in the maternal healthcare unit.	34	1.00	5.00	3.5588	1.15971
Establishing skills gaps in maternal healthcare services in the sector is clear.	34	1.00	5.00	3.1176	1.06642
Selection for training for health workforce in the sector is objective.	34	2.00	5.00	3.4706	.92884
Retirees are willing and are facilitated to train mentees before retiring from the maternal healthcare unit.	34	1.00	4.00	2.3824	.88813

Managers and human resource specialists do not fully understand human planning process in maternal healthcare.	34	1.00	5.00	2.8529	1.32876
Human resource planning is a time-consuming and expensive exercise and is not necessary in the sector.	34	1.00	4.00	1.5000	.89612
The wage bill in the maternal health program is unsustainable.	34	1.00	3.00	1.8529	.65747
The county leadership supports maternal healthcare.	34	1.00	5.00	4.2353	.95533
Information on human resource planning is available.	34	2.00	5.00	3.5588	.92740
Change of the human resource plans in the maternal health program is necessary.	34	1.00	5.00	3.5882	1.18367

From the findings, the respondents were in agreement that the county leadership supports maternal healthcare as shown by a mean of 4.2353, change of the human resource plans in the maternal health program is necessary as shown by a mean of 3.5882, information on human resource planning is available as shown by a mean of 3.5588, it is not difficult to match function to the skills and numbers of staff needed in the maternal healthcare unit as shown by a mean of 3.5588, and that selection for training for health workforce in the sector is objective as shown by a mean of 3.4706. The findings showed that the respondents had neutral opinion that establishing skills gaps in maternal healthcare services in the sector is clear as shown by a mean of 3.1176. The respondents also disagreed that the maternal healthcare organizational chart/organogram in the sector is easy to implement as shown by a mean of 2.9706, managers and human resource specialists do not fully understand human planning process in maternal healthcare as shown by a mean of 2.8529, retirees are willing and are facilitated to train mentees before retiring from the maternal healthcare unit as shown by a mean of 2.3824, the wage bill in the maternal health program is unsustainable as shown by a mean of 1.8529, and that human resource planning is a time-consuming and expensive exercise and is not necessary in the sector as shown by a mean of 1.5000.

Respondents were asked to indicate the main challenges that they experience while implementing human resource plans in the sector. The respondents indicated that some of the challenges they encounter relate with personal welfare of employees and they include aged, sick and demoralized staff. The sector has poor involvement culture, bureaucracies, nepotism, varying terms of employment and lack of harmonized establishers. Other challenges encountered are inadequate budgetary allocation on HR; poor staffing level in the HR unit; lack of an approved staff establishment for the sector; political interference; and lack of products and equipment. The respondents indicated that there is lack of proper succession plans and in cases where there are plans there is still the challenge of delayed implementation. Implementation of HR plans is time consuming, expensive and receives partial support from top management.

It is also challenging to identify suitable staff, and to deploy them to the right place. Also, involvement in HR plans in county is selective. There is also the issue of amalgamation of devolved staff to the county for maternal health. Other issues are resistance to change; inadequate information about HR issues; not all HR officers are competent on their job; time frame not observed accordingly; recruitment of new staff especially shortlisting not transparently done; devolved systems making it difficult for national policies to cascade; national officers still holding onto county activities; possibility of change with every new county leadership; staff apathy due to non-promotions since devolution. Additionally, they indicated that they face the challenge of shortage of staff; elastic supply of commodities; lack of modern technologies and upgrading of our facilities; lack of staff motivation; poor referral systems and emergency response due to inadequate ambulances and drivers; poor accessibility due to poor roads in some areas like slums; lack of telephone communications mans between the facility and the county headquarter and emergency office; inadequate financial resources/budget for recruitment; frequent employee transfers and leadership turnover; lack of structured training needs assessment and training approvals that are not informed by needs; skill gaps.

They also face the challenge of unscheduled recruitment making it difficult to plan for skills development of additional staff; poorly motivated HR due to long standing stagnation in career development progression; lack of harmonized payrolls for the former local government and devolved HR; unavailability of up to date HR data; poor career progression that is pegged on unprogressive schemes of service.

The respondents indicated that they can resolve the issue by increasing HR in number and skills; capacity building for existing HR; provide the necessary equipment and tools for service delivery and providing on the job training for the staff.

4.6 Chapter Summary

This chapter discusses the findings of the data collection exercise according to the contents of the data collection instruments. It details the response rate and the detailed results of each of the information obtained in the questionnaire. Diagrams are used for ease of reference and to summarize the findings from the data collection exercise. The responses are categorized according to each specific objective of this study.

CHAPTER FIVE: DISCUSSIONS, CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

Summary of the findings, conclusions and recommendations are presented in this chapter. The objectives of the study were addressed by the conclusions and recommendations made.

5.2 Summary of the Findings

This section was presented in line with the study's specific objectives which were: To analyze the human resource plans that exist in Nairobi City County maternal health program; to determine the extent to which human resource plans are implemented to support maternal health outcomes in Nairobi City County; and to establish the challenges of implementing human resource plans in the maternal health unit at Nairobi City County.

5.2.1 Human Resource Plans That Exists in the Health Sector

The study found that there was evidence that job requirements and descriptions of each position in the maternal health programmes are clear, the staff establishment of maternal health programs in the facility are at variance (positive or negative) with the optimal levels, they often participate and contribute to the sector training committee, and that the maternal health programme in the facility has an Organizational Chart/Organogram. The fact that the staff establishment is at variance brings out the fact that the human resource planning process in the maternal health unit does not develop an organizational design as propounded by Yadav and Dabhande (2014). The study further found neutral opinions from the respondents that the sector has a functional training committee for maternal healthcare, the sector has budgeted for training and recruitment to bridge variances in the staff establishment for maternal healthcare, they are aware of the number of maternal health officers retiring each year, the sector training committee has developed a training needs assessment based on the skills gap in the maternal health program in the facility, the sector has budgeted for replacement of the skills of retiring staff in the 3 year rolling budget (MTEF) and that the staff establishment of maternal health programmes in the facility is at an optimal level. This supports the assertion by Bratton and Gold (1999) that human resource planning cannot function without management input and resources. It is a fair conclusion therefore that in Nairobi City County, human resource planning in the maternal health unit is resourced and is supported by the management. The study further found that the respondents disagreed that there is a succession plan for maternal health

care in the facility. This is a crucial finding as one function of the human resource planning process is to undertake responsive succession planning as opined by Yadav and Dabhande (2014).

The respondents gave various activities in response to the human resource plans that exist in Nairobi City County health sector specifically the maternal health unit. They indicated that the health management unit is planning recruitment and selection; staff promotions; staff development; salary and rewards; succession planning and to ensure implementation of the plans, they have developed an annual work plan. This is in conformity with the finding of Yadav and Dabhande (2014) that when conducting a human resource planning process, there need to be a tool for assessing and implementing the plan. The respondents also indicated that there are plans to recruit more staff in the financial year 2019/20 and this is in efforts to increase the number of nurses in new facilities and the ones already existing.

Policy makers also indicated that the county government is ensuring that placement of staff in the maternal health is informed by skill and experience. They also have standing staffing norms guiding placement of staff and for training/capacity building of staff in maternal health unit. They have also plans to partner with donor partners for support to fill in gaps that the county may be unable to address. The county government has also budgeted for maternal health care and the budget is meant to cover for reproductive health training for clinical officers and employment of more clinical officers; establishment of special clinics to cater for non-communicable diseases like diabetics and hypertension and other comprehensive care clinics. This finding demonstrated the leadership support in achieving maternal health outcomes through human resource planning.

According to the study, planning is generalized under all cadres and is not programme specific, that is human resource planning for maternal healthcare is not isolated according to the maternal health outcomes. The study findings also indicated that human resource planning is based on the workload specifically, the number of mothers accessing maternal healthcare compared to staff caring for them (population based). Other respondents also indicated that human resource planning is done by identifying staffing needs determined by SCHMT's and HMT's and forwarded to CHMT for consideration and approval and then prepared for approval by CPSB if need be. This mode seemed to be adhoc and arbitrary as opposed to being based on the desired maternal health outcomes.

It emerged that the health sector leadership has appointed focal persons charged with different programs at county level who also conduct the same in sub counties for effective service deliver. There are established units in the sector that cater for maternal health care who plan with other units under the guidance of the director, chief officer and the CECM. They also indicated that the county involves those in maternal unit who are mainly staff trained in midwifery, nurses, and clinicians trained in reproductive health. Another method is through skill audit depending on the gaps identified during supervision during review of reports and service delivery quality audits, through the relevant technical working groups and management team at both levels and this is done in a well-planned and organized manner.

From the data collected, it is apparent that there is no single, ascertainable human resource plan and those in use seem to be emergent according to circumstances. It also emerged from the findings that human resource plans in the maternal healthcare unit do not conform to the position of Lee and Cummings (2008) who holds that human resource plans should involve strategies to retain staff and provide a stable workforce reducing costs associated with ongoing recruitment, orientation and training. Though the sector budgets for human resource plans, there was no evidence of cost reduction measures or strategies to retain staff besides promotions.

5.2.2 The extent to which Human Resource Plans are implemented to support maternal health.

The study brought out the fact the respondents were in agreement that when human resource plans are implemented the service delivery turnaround time improves and there will be cost reduction in delivering maternal healthcare. The study also found that at least 4 seminars and workshops are held to improve knowledge on maternal health care every year, and maternal health care professionals are assigned tasks which they are qualified for. This supports the findings by Gamage (2014) who held that such efforts improve maternal healthcare indicators and build long term sustainable health worker programs.

From the findings the respondents had neutral opinions on whether training needs assessments inform the training of maternal health workers, recruitment and training of maternal health workers Neutrality was also found on whether trainings are being conducted based on the established job requirements and descriptions for each position. The study was not conclusive on whether recruitment and training of maternal health

workers was in line with the approved structure and the organizational chart/organogram in the maternal health program. Evidence from the study also established that all retiring maternal health workers are not assigned mentee to train every year and there is high staff turnover in maternal health programs. However, the staff in the maternal health programs does not often resign. This means that those already working in this unit appreciate their work despite the challenges that come with it.

From the finding in the study, the maternal healthcare unit in Nairobi City County seems to lack a properly developed implementation model as advised by Bramham (1989), Gomez - Mejja, Balkin and Cardy, (2004), Noe, Hollenbeck, Gerhart and Wright, (2007) and Armstrong (2007) who have all taken the approach of developing models as guidelines for implementation of human resource plans. This finding is despite the fact that the respondents indicated that an annual work plan is the tool used to implement human resource plans in the sector. It was found to be difficult to measure the success of the annual work plan and link it to a determined strategy as advised by Noe et al (2007).

From the study, HR plans are done at the county headquarters by management teams from the two levels that is, county and sub county level in order to strengthen devolution of services. During the development of recruitment plans which is the main human resource planning aspect focused on, there is inter-sectoral involvement and the employed staff are posted where there is need, transferred or reorganized based on needs and qualification. The health sector management also prioritizes training based on periodic skills audit and corresponding needs of the organization; they release officers for training to bridge skills gaps and mentor new staff using older staff as a loose form of succession planning. The above findings show some level of HR planning and practices being carried out in the county. However, more emphasis needs to be put on succession planning that does not seem to be well articulated as seen in this study.

The study also found that each cadre follows a scheme of service and approved guidelines which are the main human resource plans existing in the maternal healthcare unit. Although these schemes were reviewed in the recent past they were done without outcomes in mind and are mere generic guidelines of what is ideal per cadre. There is also the formation of TWGs with clear terms of reference to support implementation process. HR plans in the health sector are implemented by recruitment of skilled staff, timely payment of salaries, and facilitating career development for employees through training.

Another way was through identification of staffing gaps for placement and recruitment; regular training for update on new developments and by preparing annual work plan.

The study revealed that succession planning has been implemented in the sector but the implementation is not well done yet/fully implemented. Cappella (2009) opined that when implementing human resource plans, the present supply and demand should be evaluated through forecasting. This futuristic approach to human resource plans implementation would be apparent in the way an organization handles its succession planning process. The respondents indicated that each section in the maternal health unit is trying to ensure succession planning is well undertaken mentorship programs and transfer of skills from older staff (experienced) to younger/new staff.

The study also found that the maternal healthcare unit had poor succession planning skills because of the large number of aging workforce not matched with recruitment of younger staff to take over after the imminent retirement of the older staff. The management have however put in effort to mitigate the issue by having capacity building exercises for the younger staff and through coaching and training to ensure that there is flow in succession planning in that if an officer leaves there is someone who can fill in their position.

The study also revealed that succession planning in the sector is work in progress but still facing the challenge of insufficient staff. The respondents indicated that the management team is trying to mitigate the challenge by having a 5-year retirement projection of staff to make sure adequate training, recruitment and mentorship is conducted.

The study established that there was frequent turnover in the maternal health because of several factors. Some of the factors were that staff were redistributed to fill gaps and shortages in other programs; young energetic officers left their service for better opportunities in the private sector and self-employment or lengthy post graduate training; and retirement of aged employees.

The study also established that the high rate of employee turnover in the maternal healthcare unit can be attributed to the lack of specific staff assigned to exclusively provide services in the maternal healthcare program at the facility level except at the headquarters (county). This is lack of dedicated program staff compromised the implementation of human resource plan to support maternal health outcomes. The respondents further indicated that the issue of high employee turnover can be mitigated by having continuous training of staff to equip them with knowledge and skills to

implement maternal health programs with ease giving them job satisfaction and therefore prevents high staff turnover through encouraging specialization.

The study found that turnaround times for service delivery are affected by low staff numbers. They also indicated that it is improving with the increase in number of nursing staff and that it can be improved further by having staff with better knowledge and skills to carry out procedures with ease and within short period of time and this will in turn solve the issue of long waiting time which is a critical issue in maternal healthcare and influence indicators such as maternal mortality. This shows that to some extent the implementation of the human resource plans is being done to support maternal health outcomes.

5.2.3 Challenges of Implementing Human Resource Plans

The study generally found that the respondents were in agreement that the county leadership supports maternal healthcare, change of the human resource plans in the maternal health program was necessary, information on human resource planning was available, it was not difficult to match function to the skills and numbers of staff needed in the maternal healthcare unit, and that selection for training for health workforce in the sector is objective. The findings showed that the respondents had neutral opinions that establishing skills gaps in maternal healthcare services in the sector is clear. The respondents also disagreed that the maternal healthcare organizational chart/organogram in the sector is easy to implement, managers and human resource specialists do not fully understand human planning process in maternal healthcare, retirees are willing and are facilitated to train mentees before retiring from the maternal healthcare unit, the wage bill in the maternal health program is unsustainable, and that human resource planning is a time-consuming and expensive exercise and is not necessary in the sector.

According to the study, some of the challenges encountered while implementing human resource plans in the maternal healthcare unit relate to personal welfare of employees and they include aged, sick and demoralized staff. The maternal healthcare program has poor involvement culture, bureaucracies, nepotism, varying terms of employment and lack of harmonized establishments. These challenges are unlike those identified by Wright (2005) which are more outward based than internal as demonstrated by the maternal health unit in Nairobi City County.

Other challenges encountered are inadequate budgetary allocation on human resource planning; poor staffing in the maternal healthcare unit; lack of an approved staff establishment for the sector; political interference; and lack of products and equipment. This challenges affect the management's ability to gather accurate information about the maternal healthcare workforce, analysis of costs and the capacity to understand existing competencies in the maternal healthcare program. The respondents indicated that there was lack of proper succession plans and in cases where there are plans there is still the challenge of delayed implementation. Implementation of HR plans was found to be time consuming, expensive and receives partial support from top management. Kaufmann and Miller (2011) would advise that planners must increasingly develop flexible planning scenarios leading to contingency plans. This would address the challenges faced in implementation as the plans would be changed with the changing environment experience hence by passing delays and budgetary constraints.

The study also found that it was challenging to identify suitable staff, and to deploy them to the right place this is because of the changing roles in the maternal healthcare unit. Also, the involvement of key stakeholders in the human resource planning process in maternal health program was found to be selective. This was illustrated by the fact that the top echelons of the sector (policy makers) were fully aware of the on goings in the sector regarding human resource planning. This made the assertion that there is leadership support in human resource planning wanting.

Another challenge in implementing human resource plans in the maternal healthcare program revolves around the issue of amalgamation of devolved staff into the county. This challenge can be attributed to devolution specifically the emergence of new structures, processes and procedures which have not necessarily led to performance improvement in maternal healthcare indicators. Other emerging challenges to implementation are resistance to change; inadequate information about HR issues; incompetency of human resource officers in the unit; lack of adherence to policies; recruitment of new staff especially shortlisting not transparently done; and challenges of devolved systems making it difficult to cascade national policies. Additionally, the study found that that the maternal health program faces the challenge of severe shortage of staff; lack of staff motivation; inadequate financial resources/budget for recruitment; frequent employee transfers and leadership turnover; lack of structured training needs assessment and training approvals that are not informed by needs; skill gaps.

They also face the challenge of unscheduled recruitment making it difficult to plan for skills development of additional staff; poorly motivated HR due to long standing stagnation in career development progression; unavailability of up to date HR data; poor career progression that is pegged on unprogressive schemes of service.

The study indicated that the issues can be resolved by increasing HR in number and skills; capacity building for existing HR; provide the necessary equipment and tools for service delivery and providing on the job training for the staff.

Kazan (2015) advises that managers must create an appropriate set of methods, procedures and strategies that consider the institutional context, analyses current performance vis a vis the desire performance, look into underlying causes of performance gaps, design, select and implement appropriate interventions and evaluate change in performance. This advice summarizes the gap giving rise to the challenges being experienced in the implementation of human resource plans in the maternal healthcare unit in Nairobi City County.

5.3 Conclusions

The study sought to analyze the human resource plans that exist in Nairobi City County maternal health unit. The study found that there are several plans that exist in Nairobi City County Health Sector. Some of the plans are: Schemes of Service, Recruitment plan; staff promotion plans; staff development plans; and succession plans. To support implementation of the said plans the management has developed annual work plans which inform the budget and performance expectations. The study also found that the challenges in implementing human resource plans in the maternal health unit are as a result of devolution with brought in new structures, procedures and processes. The study therefore concludes that human resource planning significantly and positively influences maternal health outcomes in Nairobi City County.

The study sought to assess the extent to which human resource plans are implemented to support maternal health outcomes in Nairobi City County. The study revealed that succession planning has been implemented in the sector but the implementation is not well done yet/fully implemented. The study further established that implementation of human resource plans and maternal health outcomes in Nairobi City County were strongly and positively related. The study therefore concludes that implementation of

Human Resource Plans significantly and positively influences maternal health outcomes in Nairobi City County.

The study assessed the challenges of implementing human resource plans in the maternal health unit at Nairobi City County. The study found that the sector faces several challenges and some of the challenges are poor involvement culture, bureaucracies, nepotism, varying terms of employment and lack of harmonized establishments. The study also established that challenges of implementing human resource plans and maternal health outcomes in Nairobi City County were strongly and negatively related. The study therefore concludes that challenges of implementing human resource plans significantly and negatively influenced maternal health outcomes in Nairobi City County.

5.4 Recommendations

From the foregoing human resource planning has positive influence on maternal health outcomes. The results therefore support the fact that Nairobi county health sector should increase its assessment of human resource planning in the maternal healthcare program to ensure achievement of maternal health outcomes and to increase efficiency and quality of service delivery in maternal health outcomes. This can be achieved by having determined and specific organizational chart for the maternal health program, conduct of regular training needs assessment of the program to increase their employee competency and forecast the demand of the program.

The maternal health program faces a severe case of an ageing workforce thus increasing the rate of turnover and insufficient numbers of employees; therefore, it is recommended that the maternal health program urgently needs a thorough succession plan and strategy to ring fence exiting knowledge and skills where experienced employees mentor new employees to fill their positions when they exit.

The implementation of human resource plans positively affects maternal health outcomes. The study therefore recommends that the management should ensure that the sector employs skilled staff and creates a culture of continuous performance improvement through flexible and efficient implementation of human resource plans. The management should also motivate employees by providing them with career development opportunities and training; pay them on time as this will increase retention and lower the rate of employee turnover.

The study also recommends regular identification of staffing gaps based on maternal health outcomes and not necessarily based on a generic adherence to staffing norms and schemes of service. This specificity will ensure that human resource plans are responsive to the desired outcomes. This will also guide placement and recruitment and also customize regular training to update employees on new developments. The implementation process can also be greatly improved by adopting an implementation model.

The challenges encountered during the implementation of human resource plans negatively affected maternal health outcomes. The study recommends for management of health sector to establish the challenges that are encountered and come up with ways of mitigating the challenges. This includes strengthening devolution by adopting the new structures, procedures and processes to human resource plans specifically in identifying performance gaps, selecting designs and interventions in the human resource planning process. Basically, human resource planning reforms are advised.

5.5 Suggestions for Further Studies

The general objective of the study was to assess human resource planning in the maternal health program in Nairobi City County. The study was conducted in Nairobi County; the study therefore recommends replication of the research study in other counties of similar characteristics to Nairobi. The study concentrated on maternal health outcomes, the study therefore recommends further studies to be carried out general health care provision.

5.6 Limitations and Assumptions of the Study

The study was constrained in terms of non-responsiveness of respondents especially on achievement of targeted outcomes due to fear of victimization and sanctions for poor performance.

The study used questionnaires as the main instrument for collecting data as well as secondary data from the County's annual reports. This limited the control on the respondents in regard to the information that they filled in the questionnaires and that which was reported in the annual reports. Questionnaires further provided a limitation as they are respondent's opinions and may thus be subjective.

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APPENDICES

Appendix I: Letter of Introduction

Dear Respondent,

My name is Susan Wangari Waweru and I am student at Strathmore University Business School in the Master of Public Policy and Management program. I am conducting a survey for a research thesis titled **Assessment of Human Resource Planning in the Maternal Health Program in Nairobi City County** in partial fulfillment of the requirements of the degree.

To undertake the study, I request for your invaluable assistance in carrying out the research by filling out the questionnaire attached to this letter. The findings of the research will help streamline human resource planning in the health sector and thus enhance service delivery especially in the maternal health services. The information given is voluntary and all responses will be kept confidential and will only be used for academic research purposes.

Your honesty and cooperation will be highly appreciated.

Yours faithfully,

Susan Waweru

Appendix II: Participant Information and Consent Form

ASSESSMENT OF HUMAN RESOURCE PLANNING IN THE MATERNAL HEALTH PROGRAM IN NAIROBI CITY COUNTY

SECTION 1: INFORMATION SHEET

Investigator: Susan Wangari Waweru

Institutional affiliation : Strathmore University Business School (SBS)

SECTION 2: INFORMATION SHEET–THE STUDY

2.1: Why is this study being carried out?

The study is being carried out to assess human resource planning in the maternal health program in Nairobi City County. The idea behind this is to establish whether the health sector has human resource plans in the maternal health program, whether the said plans are being implemented, the effect of the human resource plans in maternal health care and the challenges in implementing the said human resource plans.

The study will inform policy makers on the gaps in human resource plans and the efficacy of existing plans. This will enhance service delivery in maternal health programs.

2.2: Do I have to take part?

No. Taking part in this study is entirely optional and the decision rests only with you. If you decide to take part, you will be asked to complete a questionnaire to get information on human resource planning in the maternal health program in Nairobi City County. If you are not able to answer all the questions successfully the first time, you may be asked to sit through another informational session after which you may be asked to answer the questions a second time. You are free to decline to take part in the study from this study at any time without giving any reasons.

2.3: Who is eligible to take part in this study?

The study seeks to target respondent at the policy making and managerial positions of the health sector in Nairobi City County. Specifically, this study will conduct a total census of the Nairobi City County management employees whose responsibility is to undertake the human resource planning function specifically designing and monitoring

implementation of the human resource plans in the health facilities majoring in maternal health care.

2.4: Who is not eligible to take part in this study?

The study does not include officers of donor funded and joint venture programs as they are term based. The study also does not include officers at the tactical level of service delivery.

2.5: What will taking part in this study involve for me?

You will be approached by the researcher and/or her research assistants and requested to take part in the study. If you are satisfied that you fully understand the goals behind this study, you will be asked to sign the informed consent form (this form) and then taken through a questionnaire to complete.

2.6: Are there any risks or dangers in taking part in this study?

There are no risks in taking part in this study. All the information you provide will be treated as confidential and will not be used in any way without your express permission.

2.7: Are there any benefits of taking part in this study?

The information will be used to improve service delivery in the maternal health program as well as enhance human resource management functions such as recruitments, promotions, training and succession management.

2.8: What will happen to me if I refuse to take part in this study?

Participation in this study is entirely voluntary. Even if you decide to take part at first but later change your mind, you are free to withdraw at any time without explanation.

2.9: Who will have access to my information during this research?

All research records will be stored in securely locked cabinets. That information may be transcribed into our database but this will be sufficiently encrypted and password protected. Only the people who are closely concerned with this study will have access to your information. All your information will be kept confidential.

2.10: Who can I contact in case I have further questions?

You can contact me, Susan Wangari Waweru, at SBS, or by e-mail susan.waweru@strathmore.edu. You can also contact my supervisor, Dr. Hazel Mumbo at the Strathmore Business School, Nairobi, or by e-mail hazelmmiseda@gmail.com.

If you want to ask someone independent anything about this research please contact:

The Secretary–Strathmore University Institutional Ethics Review Board, P. O. BOX 59857, 00200, Nairobi, email ethicsreview@strathmore.edu Tel number: +254 703 034 375

I, _____, have had the study explained to me. I have understood all that I have read and have had explained to me and had my questions answered satisfactorily. I understand that I can change my mind at any stage.

Please tick the boxes that apply to you;

Participation in the research study

☐ I AGREE to take part in this research

☐ I DO NDON'T AGREE to take part in this research

Storage of information on the completed questionnaire

☐ I AGREE to have my completed questionnaire stored for future data analysis

☐ I DO NDON'T AGREE to have my completed questionnaire stored for future data analysis

Participant's Signature: _____

Date: _____/_____/_____

DD / MM / YEAR

Participant's Name: _____

I, _____ certify that I have followed the SOP for this study and have explained the study information to the study participant named above, and that s/he has understood the nature and the purpose of the study and consents to the participation in the study. S/he has been given opportunity to ask questions which have been answered satisfactorily.

Investigator's Signature: _____

Date: _____/_____/_____

DD / MM / YEAR

Investigator's Name: _____

Appendix III: Questionnaire for Nairobi County Health Management Staff

SECTION A: BACKGROUND INFORMATION

Please tick in the applicable fields below:

1. What age (years) bracket do you fall:

   20 – 30 ( )

   31 – 40 ( )

   41 – 50 ( )

   51 – 60 ( )

   Above 60 ( )

2. What is your gender:

   Male ( )

   Female ( )

3. Indicate your highest level of education:

   Certificate ( )

   Diploma ( )

   Undergraduate ( )

   Postgraduate ( )

4. Indicate the facility level which you work:

   Level 4 – Primary ( )

   Headquarters ( )

   Other: .....

5. How long have you been serving in the health facility?

   1 -3 years ( )

   4 – 6 years ( )

   7 – 9 years ( )

   Above 10 years ( )

Section B: Human Resource Plans That Exists in the Health Sector

Indicate your level of agreement on the following statements about the human resource plans that exists in Nairobi City County Health Sector. Scale 1- strongly disagree, 2 – disagree, 3- moderate, 4- agree, 5- strongly agree:

Statements	1	2	3	4	5
The maternal health programme in the facility has an Organizational Chart/Organogram.					
The job requirements and descriptions of each position in the maternal health programmes are clear.					
The staff establishment of maternal health programmes in the facility is at an optimal level.					
The staff establishment of maternal health programmes in the facility is at variance (positive or negative) with the optimal levels.					
The sector has budgeted for training and recruitment to bridge variances in the staff establishment for maternal healthcare.					
The sector has a functional training committee for maternal healthcare.					
I often participate and contribute to the sector training committee.					
The sector training committee has developed a training needs assessment based on the skills gap in the maternal health program in the facility.					
I am aware of the number of maternal health officers retiring each year.					
There is a succession plan for maternal health care in the facility.					
The sector has budgeted for replacement of the skills of retiring staff in the 3 year rolling budget (MTEF).					

6. Indicate the human resource plans that exist in Nairobi City County Health Sector which relate to maternal health.

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7. How is human resource planning for maternal healthcare done in the county health sector?

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Section C: The extent to which Human Resource Plans are implemented to support maternal health.

8. Indicate your level of agreement on the following statements about the extent to which human resource plans are implemented to support maternal health outcomes in Nairobi City County. Scale 1- strongly disagree, 2 – disagree, 3- moderate, 4- agree, 5- strongly agree:

Statements	**1**	**2**	**3**	**4**	**5**
The organizational chart/organogram in the maternal health program is fully utilized in the sector.					
Recruitment and training of maternal health workers are being conducted based on the established job requirements and descriptions for each position.					
Recruitment and training of maternal health workers is in line with the approved structure.					
Training needs assessment informs the training of maternal health workers.					

At least 4 seminars and workshops are held to improve knowledge on maternal health care every year.					
All Retiring maternal health workers are assigned a mentee to train every year.					
Maternal Health care professionals are assigned tasks which they are qualified for.					
Staff in the maternal health programs often resigns					
There is high staff turnover in maternal health programs.					
If human resource plans are fully implemented there will be cost reduction in delivering maternal healthcare.					
When human resource plans are implemented the service delivery turnaround time improves.					

9. How are human resource plans in the sector implemented to support maternal healthcare services?

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10. To what extent has the succession plan in the sector been implemented to support maternal healthcare? Please explain.

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11. Comment about staff turnover in the maternal health program.

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12. Comment about the turnaround times of service delivery in the maternal healthcare unit.

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Section D: Challenges of Implementing Human Resource Plans

13. Indicate your level of agreement on the following statements about the challenges of implementing human resource plans in Nairobi City County. Scale 1- strongly disagree, 2 – disagree, 3- moderate, 4- agree, 5- strongly agree:

Statements	**1**	**2**	**3**	**4**	**5**
The maternal healthcare organizational chart/organogram in the sector is easy to implement.					
It is not difficult to match function to the skills and numbers of staff needed in the maternal healthcare unit.					
Establishing skills gaps in maternal healthcare services in the sector is clear.					
Selection for training for health workforce in the sector is objective.					
Retirees are willing and are facilitated to train mentees before retiring from the maternal healthcare unit.					
Managers and human resource specialists do not fully understand human planning process in maternal healthcare.					
Human resource planning is a time-consuming and expensive exercise and is not necessary in the sector.					
The wage bill in the maternal health program is unsustainable.					

The county leadership supports maternal healthcare.					
Information on human resource planning is available.					
Change of the human resource plans in the maternal health program is necessary.					

14. What would you say are 5 main challenges that you experience while implementing human resource plans in the sector?

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THANK YOU

Appendix III: Questionnaire for Nairobi County Health Policy Makers

SECTION A: BACKGROUND INFORMATION

Please tick in the applicable fields below:

1. What age (years) bracket do you fall:

   20 – 30 ( )

   31 – 40 ( )

   41 – 50 ( )

   51 – 60 ( )

   Above 60 ( )

2. What is your gender:

   Male ( )

   Female ( )

3. Indicate your highest level of education:

   Certificate ( )

   Diploma ( )

   Undergraduate ( )

   Postgraduate ( )

4. Indicate the facility level which you work:

   Level 4 – Primary ( )

   Headquarters ( )

   Other: .....

5. How long have you been serving in the health facility?

   1 -3 years ( )

   4 – 6 years ( )

   7 – 9 years ( )

   Above 10 years ( )

Section B: Human Resource Plans That Exists in the Health Sector

Indicate your level of agreement on the following statements about the human resource plans that exists in Nairobi City County Health Sector. Scale 1- strongly disagree, 2 – disagree, 3- moderate, 4- agree, 5- strongly agree:

Statements	**1**	**2**	**3**	**4**	**5**
The maternal health programme in Nairobi County has an Organizational Chart/Organogram.					
The job descriptions of each position in the maternal health programmes are clear.					
The staff establishment of the maternal health programme in the county is at an optimal level.					
The staff establishment of maternal health programmes in the county is at variance (positive or negative) with the optimal levels.					
The county has adequately budgeted for redeployment, training and recruitment to bridge variances in the staff establishment.					
The county health sector has a functional training committee.					
I often participate and contribute to the health sector training committee.					
The health sector training committee has developed a training needs assessment based on the skills gap in the maternal health program in the county health sector.					
I am aware of the number of officers retiring in the maternal health program each year.					
There is a succession plan in the county health sector.					

The county health sector has budgeted for replacement of the skills retiring staff in the 3 year rolling budget (MTEF).					

6. In developing human resource plans, what does the sector base its decisions on?

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7. Are there other human resource plans that exist in Nairobi City County Health Sector which relate to maternal health?

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8. Does the health sector have a Human Resource for Health Strategic Plan? If Yes, briefly explain its objectives and contents.

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9. Does the health sector have human resource policies? If Yes, which polices?

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10. What is the role of Schemes of service in human resource planning in the health sector in the county?

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Section C: The extent to which Human Resource Plans are implemented

Indicate your level of agreement on the following statements about the extent to which human resource plans are implemented to support maternal health outcomes in Nairobi City County. Scale 1- strongly disagree, 2 – disagree, 3- moderate, 4- agree, 5- strongly agree:

Statements	1	2	3	4	5
The organizational chart/organogram is fully implemented in the county.					
Recruitment and training of maternal health workers is based on the established job descriptions for each position.					
Recruitment and training of maternal health workers is in line with the staff establishment.					
Maternal health care professionals in Nairobi City County are being trained.					
Training of maternal health workers is based on the training needs assessment.					
Seminars and workshops are held to improve knowledge on maternal health care.					
Retiring maternal health workers are assigned a mentee to train.					
Maternal Health care professionals are assigned tasks which they are qualified for.					

11. How are human resource plans in the county health sector implemented?

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12. To what extent has the succession plan in the maternal health program in the county health sector been implemented? Please explain.

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13. How else have other human resource plans been implemented to support maternal health outcomes in Nairobi City County?

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14. How is implementation of human resource plans in the county health sector measured?

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15. Is the implementation of human resource plans in the county health sector monitored? Please explain.

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16. Are there control measures applicable in the implementation of human resource plans in the county health sector? Please explain.

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Section D: Challenges of Implementing Human Resource Plans

Indicate your level of agreement on the following statements about the challenges of implementing human resource plans in Nairobi City County. Scale 1- strongly disagree, 2 – disagree, 3- moderate, 4- agree, 5- strongly agree:

Statements	1	2	3	4	5
The organizational chart/organogram in the county is easy to implement.					
It is not difficult to match function to the skills and numbers of staff needed.					
Establishing skills gaps in maternal healthcare services in the county health sector is clear.					
Selection for training in the county health sector is objective.					
Retirees are willing and facilitated to train mentees before retiring.					
Managers and human resource specialists do not fully understand human planning process.					
Human resource planning is a time-consuming and expensive exercise.					

17. What are the challenges of implementing human resource plans in Nairobi City County.

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THANK YOU