INSTITUTIONAL FACTORS INFLUENCING PERFORMANCE OF MATERNAL HEALTH PROJECTS IN KENYA: A CASE OF LINDA MAMA PROJECT IN ISIOLO COUNTY, KENYA

BY

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DECLARATION

This project is my own original work and has not been presented for any award in any other university.

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This research project is presented for examination with my approval as the university supervisor.

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DEDICATION

I dedicate this project to almighty God, who has guided me and been my source of strength through the journey.

I sincerely dedicate this work to my loving husband Guyo Dulacha Huqa who has been there for me, encouraged me throughout this process.

To my children Muslims Guyo, Sofia Guyo and Abu bakr guyo who have been a source of inspiration to me.

Last but not list to my parents Mr Abdi Abdullah and Mrs.Muslima Huka, I would not be here without you.

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ABBREVIATIONS AND ACRONYMS

ANC: Antenatal Care

CDC: Disease and Control

CIDA: Canadian International Development Agency

GOK: Government of Kenya

HCWs: Health Care Workers

HEWs: Health Extension Workers

HIPC: Highly Indebted Poor Countries

LMICs: Low- and Middle-Income Countries

NGOs: Non-Governmental Organizations

NHIF: National Hospital Insurance Fund

PMTCT: Prevention of Mother to Child Transmission

SPSS: Statistical Package for Social Sciences

UHC: Universal Health Coverage

UNDP: United Nations Development Programme

UNFPA: United Nations Population Fund

UNICEF: United Nations Children's Fund

USA: United States of America

WHO: World Health Organization

ABSTRACT

The purpose of this study was to determine factors influencing the Performance of Linda Mama Project in Isiolo County, Kenya. The study sought to achieve the following objectives; to evaluate the extent to which staffing, financial resources, awareness of the project and availability of hospital infrastructure influence performance of Linda Mama Project in Isiolo County, Kenya. This study was grounded on resource dependency theory (RDT), stakeholders' management theory, empowerment theory and optimal resource allocation theory. The study adopted a descriptive research design with the target population being 646 comprising of Antenatal nurses, Mothers attending clinics and Project managers in Isiolo County. Stratified simple random sampling techniques were used to select a sample of 118 respondents. Primary data was obtained using self-administered questionnaires while secondary data was obtained using data collection sheet. Data was analysed using Statistical Package for Social Sciences (SPSS Version 22.0) which is the most recent version. Descriptive statistics such as frequencies, percentages, mean score and standard deviation were estimated for all the quantitative variables and information presented inform of tables. The qualitative data from the open-ended questions was analysed using conceptual content analysis and presented in prose. Inferential data analysis was done using multiple regression analysis. In testing the significance of the model, the coefficient of determination (R^2) was used. F-statistic was also computed at 95% confidence level to test whether there is any significant relationship between procurement process and the various factors affecting it. The Policy makers are expected to use this study to evaluate the impact of the government interventions on the main components of maternal health care services with an aim of improving. It will assist the government in budgeting for maternal care, hence provide quality maternal care, and add to existing knowledge. The study found that education and Training influence performance of Linda Mama Project in Isiolo County, Kenya to a great extent. The study found that money for salaries /wages influence performance of Linda Mama Project in Isiolo County, Kenya to a great extent. The study concluded that staffing had the greatest influence on performance of Linda Mama Project in Isiolo County, Kenya followed by availability of hospital infrastructure, then financial resources while awareness of the project had the least influence on the performance of Linda Mama Project in Isiolo County, Kenya. The study established that awareness on risks and benefits influence performance of Linda Mama Project in Isiolo County, Kenya to a great extent The study recommends that county government should ensure that adequate staff for all hospitals to ensure there is success in Maternal projects. The study also recommends the need to improve financial and social support for women and families facing maternal health crises. The study also recommends that for proper success of the MCH projects in the country and more specifically in Isiolo County, infrastructure like hospital buildings, beds, equipment, water, electricity and other sanitation infrastructure have to be considered as priority needs.

CHAPTER ONE
INTRODUCTION

1.1 Background of the Study

Health project Performance is a vital element for any national growth and development. With the current globalization programs and varied issues, health is of concern to all individuals. The quest to achieve UHC has been sought for globally. Universal Health care has three main related branches: equitable access to health services for persons in need, that the services should be accessible to those who can afford and those who cannot, that the quality of health services is good enough to improve the health of those receiving services and financial risk protection ensuring that the cost of utilizing the healthcare does not put people at risk of financial hardship. The importance of health is an inevitable necessity for any human. It is essential for any society setup and development (McCracken & Phillips, 2017).

Maternal health refers to the health of women during pregnancy, childbirth, and the postpartum period. It includes the health care dimensions of family planning, preconception, prenatal, and postnatal care in order to reduce maternal morbidity and mortality (WHO, 2016). The health care that a mother receives during the time of pregnancy, at the time of delivery, and soon after delivery is important for the survival and well-being of both the mother and her child. Maternal health (MH) is therefore a very important issue as women strive to fulfill their potential as individuals, mothers and family members, and also as citizens of a wider community. At the individual level, women's poor health causes lack/loss of employment, leading to poor income. This contributes to women's persistent poverty and lack of empowerment. Poor maternal health can also have huge costs on families in emotional, health and economic terms. It is well documented that maternal morbidities and mortalities directly affect the survival and well-being of children and also contributes to poor family relationships (Brolan, Hill & Hill, 2013).

Maternal health remains a major challenge in low- and middle-income countries (LMICs). In 2015, an estimated 303,000 women and young girls died from pregnancy and childbirth-related complications, with 99% of these deaths occurring in LMICs. Access to and availability of skilled health care workers (HCWs) throughout the maternal care continuum (antenatal, delivery, and postnatal), is necessary for reducing preventable mortality and improving quality of maternal health services. However, LMICs are plagued by chronic workforce shortages, most predominantly in rural and remote areas. A number of studies have identified access to maternity health services as a key indicator for reducing maternal mortality in developing

countries (Firoz, Sanghvi, Merialdi & von Dadelszen, 2011). According to Making Pregnancy and Childbirth Safer (fact sheet), millions of women in developing countries experience life threatening and other serious health problems related to pregnancy or childbirth. Complications of pregnancy and childbirth cause more deaths and disability than any other 4 reproductive health problems. The situation is worse in developing countries due to inadequate access to modern health services and poor utilization (WHO, 2016) The World Health Organization indicates that equitable access to quality and integrated health services for mothers, newborns, children and adolescents is critical for the achievement of the Millennium Development Goals (MDGs). While in past years significant progress has been made in reducing maternal and child deaths, the overall decrease in mortality is not fast enough to reach, by 2015, MDG 4 (reducing child mortality) and MDG 5 (improving maternal health) in all countries (WHO, 2016).

While efforts to increase availability of health workers in low resource settings through training, task shifting, and retention programs have shown promise, there are concerns that health workers' performance remains suboptimal. This has also been linked to poor access to appropriate training and supervision and the "know-do" gap, i.e. the inability to apply acquired knowledge and skills. Therefore, while health workers may have been trained to perform assigned tasks, they sometimes underperform for a myriad of reasons including environmental, client, or provider-related. This presents a significant challenge for effective decentralization of health services to the primary and secondary levels of care while maintaining quality care (Rahman, Abe, Kanda & Shibuya, 2015).

Mosley and Marion (2017) identified various factors that inhibit projects effectiveness; inadequate funding, wrong timing in funds disbursement, lack of or inadequate human resource capacity in terms of knowledge and skills, lack of accountability that is overstatement of prices and use of substandard materials ,insecurity, disagreements among beneficiaries, and social-cultural obstacles. The effectiveness of most health projects is determined by both technical and managerial capacity of the human resources of the implementing agencies. In addition, appropriate supportive infrastructure is a necessity. Traditionally, project success was measured using three basic objectives that is time, performance and cost (Dennis 2015).

Despite economic gains, health challenges continue, including increasing demand for health services at the community level and in turn, decentralizing services to communities. There are marked differences in health and economic status between different regions of Kenya. According to Kenya Vision 2030, the greatest challenges facing the health sector in Kenya are;

inadequate funding to support planned rehabilitations of health facilities, limited capacity in procurement building and supervision, inefficient supply chain management system, matching supply of skilled human resources with the high rising demand for public health services, compounded by high population growth rate and lack of data and information on community health. One of the social pillars seeks to incorporate rehabilitation of county health facilities as a social pillar which will aim at offering integrated and comprehensive healthcare to the society which the government has embarked on development of health facilities in some parts of the country (Kenya Vision 2030).

Maternal health care plays an important role in maternal mortality reduction, especially antenatal care, skilled attendance at birth and postnatal care (Machio, 2008). Maternal health care use in Kenya has improved but is not adequate specifically the proportion of women who make four antenatal care visits, who deliver at health facility and who receive postnatal care. These impedes the progress toward achieving the vision 2030 maternal mortality target of less than 200 per 100,000 live births as well as the millennium development goal five (Machio, 2018). The government in Kenya implemented free maternal care in June 2013 in order to enhance utilization of maternal healthcare services. Similarly, there has been other initiative aimed at increasing utilization of maternal health services. However, despite these initiatives, utilization of maternal care services still remains low. This explains the reason why they don't have total control over their production schedules. All these reasons make the healthcare supply chain management more dynamic and sophisticated and this affects the performance measurement of the healthcare organization (Ochako, Fotso, Ikamari & Khasakhala, 2011).

Globally, In USA, the likelihood of a woman dying during childbirth is five times higher in Greece, four times greater in Germany and three times greater in Spain. More than two women die every day in the USA from pregnancy-related complications compared to African American women who are at a higher risk with four times higher risks of death arising from such complications (Callaghan, 2012). Maternal mortality rate remains high in Pakistan at 276 per 100,000 live births with mothers dying every 20 minutes. Many countries are caught up in such challenges even with the intervention of Safe Motherhood initiative introduced in 1987 and the introduction of the MDGs. An examination of Pakistan Demographic and Health Survey in 1991 and 2006 data reveals that more than 50 per cent of women seeking maternal healthcare services prefer Traditional Birth Attendants to skilled birth attendants and of all the births, 39 per cent are attended by skilled birth attendant and only 34 per cent of the births take place at a healthcare facility (Rahman, Surkan, Cayetano, Rwagatare & Dickson, 2013).

However, despite the slow reduction rate and high geographical inequality in global Maternal Mortality Rate in the past 15–20 years, exciting progress has been made in many developing countries and many efficient interventions have been proved to remarkably reduce MMR in many developing countries. Examples include strengthening control of infectious diseases in Sir Lanka, conducting of contraceptive strategies in Bangladesh, improving accessibility to in-hospital care and midwife services in Malaysia, Thailand, Egypt and Honduras as well as the Maternal Mortality Reduction Strategy in Mongolia (Liang, 2012).

According to center for disease and control (CDC), the total amount spent on health care projects in the United States of America (USA) is greater than any other country in the world. Despite this, women in the USA have a greater lifetime risk of dying of pregnancy-related complications than women in 40 other countries in Europe but this immense investment in health care projects has placed them in a remarkable world position. In their study, Swanton and Frost (2013) argue that presidents of the USA out of the 44 who have governed the country for the last 200s years discovered the importance of population increase in labour productivity, security providence and market provision for their goods and services; a factor that gave birth to a number of maternal-child health programmes revolution (Rahman, Surkan, Cayetano, Rwagatare & Dickson, 2013).

In his quest for mother to child health providence, the Obama government had to be fueled by a number of factors for the implementation of these programmes that were not limited to: availability of financial resources from both the government and NGOs/charities, development of enabling infrastructure like alternative energy for ICU/cesarean operations, training of manpower for specialized services, 3 improved technology, information dissemination to the community, qualified and experienced management among other(Soya ,2013). However, some countries in the EU have been found to have had better and more improved MCH programmes that have up to 87% reduced maternal and infant deaths. For example, the likelihood of a woman dying during childbirth in the USA is five times greater than in Greece, four times greater than in Germany, and three times greater than in Spain. The differentiating factor between Spain and Greece with the USA is that, opposed to the USA's belief in huge financial investments in MCH projects, the other two governments have up to 67% invested in refined technology, highly trained medical experts, proper management and the social ties between the expectant mothers and their medical doctors (Rowe, 2013).

Continentally, African governments are using different strategies to increase uptake of maternal healthcare delivery programmes by providing subsidies, implementing community health insurance schemes, abolishing user fees through donor funding and utilizing partnerships to improve uptake of maternal healthcare delivery programmes by women. Many countries strive to make these programmes cost effective through partnerships with the private sector (WHO, 2016). International conferences such as the Cairo conference and Beijing conference have emphasized the importance of women's reproductive and sexual rights, as well as related perceived factors that could either positively or negatively influence uptake of various maternal healthcare delivery programmes around the world. These factors could range from demographic variables such as level of education and age to workload, social stigma and political and legal issues. Moreover, donors from the international community influence the conditions set of the county's health delivery programmes to suit their own agenda. Financing mechanisms have been noted in various countries to be a way of improving perception of services offered through various maternal healthcare delivery programmes especially in informal settlements. This could be done through investigating whether affordable insurance schemes or credits can be designed for women including those living in informal settlements. These schemes will influence their uptake of maternal health care delivery programmes (Mocumbi & Sliwa, 2012).

In Ghana for example, strides have been made in strengthening the MCH projects and institutions that offer maternal health care. It is in this note that an exemptions policy for delivery fees was introduced in 2004. It was intended to cover all facility costs for intrapartum care in both public and private facilities. Initially payment was effected through the local government administration but later through the health system. Funding was provided from a debt relief fund, under the Highly Indebted Poor Countries (HIPC) initiative. Furthermore, quality of care is an essential component of any programme that upholds the basic principle of a reproductive health approach. It is in this spirit that the Ghana government under Nana Atta Mills came up with strategies of educating all the girls in middle level colleges on better and essential maternal pre-natal and post-natal care (Ani, 2013).Therefore, factors like: financial resources mobilization and providence for both the expectant mothers and children below age 5years, professional training and changing the societal perception of MCH projects, acquiring relevant and modern technology, providing relevant infrastructure like electricity, medical laboratories and many more have greatly influenced the implementation of MCH programmes in the country(CAHR, 2014).

Regionally in Ethiopia, maternity services are usually provided at hospitals and HCs. HCs, which are designed to serve a catchment population of 25,000 people, are expected to provide a full range of routine maternal health services plus emergency obstetric care services except blood transfusion and caesarean section, which can only be provided at hospital level. HPs are run by salaried health extension workers (HEWs) who are mainly female community members with high school-level education and have been trained for one year to provide preventive, promotive and selective curative health services. HEWs increase the knowledge and skills of communities to deal with preventable diseases and to utilize health services provided at HCs and hospitals, and also provide care to women during pregnancy, childbirth and postnatal periods either in HPs or in households. Thus, they spend about 75% of their time conducting outreach activities and the rest at HPs. All the HCs and HPs in the study area are government owned and provide maternal health services free-of-charge as per the national policy (Tarekegn, Lieberman & Giedraitis, 2014).

In Burundi, for example, free services for pregnant women and the under-fives were introduced in 2006, and utilization appears to have increased as a result, though no formal evaluation has been undertaken (CIDA, 2011).The introduction of the services forced the Burundi government to borrow extra funds from the World bank to the tune of $23.6 million in 2008/2009 to expand the MCH programme started in 2006,train extra 310 nurses and 34 doctors in Kenyan Universities between 2005 to 2010, acquire cheap but highly suited technology for China and japan, increase its road network, electricity and clean water infrastructure to the MCH centres /clinics by 37% between 2005 and 2011 and have radios and TV programmes that sensitized mothers not to deliver in their homes. These were among the factors that have greatly influenced the implementation of MCH programmes to the tune of 41% between 2005 to 2013 and the country has so far seen a reduction in maternal deaths and infant mortality rates reduced by 46.12% between the said years (UNICEF, 2013).

Maternal healthcare delivery programmes in Kenya have not been equitable to all women for many years until recently when the Linda Mama programme was initiated. In April 2017, the free maternity services policy previously funded by national government was transferred to NHIF under the name of the programme now known as Linda Mama. The first phase began with faith based and low cost private sector facilities in April. It then moved to the public sector in its second phase in July 2017 and in March 2018, Linda Mama programme introduced antenatal and post-natal care (Onyo, Nyagero, Morgan, Nduba & Kermode, 2016). The Linda mama programme is meant to allow 2 all women to access free maternal health care delivery

in public health facilities. The programme seeks to provide services on the basis of need rather than on the ability to pay. This public funded health scheme will require that all pregnant women have equal provision to quality and affordable maternal healthcare services. The services and benefits received through the programme are also portable. Mothers do not need to receive services from the same provider or from the same site every time. Ochako, Fotso, Ikamari and Khasakhala (2011) estimates that the programme has contracted 502 low cost private and faith based health facilities, and approximately 4000 public sector facilities in the country as part of the scheme.

To register for the programme a client must be a pregnant woman of 18 years and above. Women can register into the program either through their mobile phones, contracted healthcare providers, NHIF service centres, Huduma centres countrywide or the NHIF registration portal using their national identification card and antenatal records. All pregnant women under the age of 18 years are registered as clients using the national I.D of their guardians and their antenatal care records. Those without national identification cards are registered using antenatal care records. Women are registered during their clinic visits for ANC, chief's meetings and church functions. Abuya, Matanda, Obare and Bellows (2018) note that the benefits enjoyed in the programme are an expanded package that include; antenatal care package, delivery package, neonatal care package, inpatient services, and outpatient services for a period of one year.

According to Kenya demographic health survey (2012), it is estimated that about 43% of births in Kenya are delivered under the supervision of skilled birth attendant; TBA continues to assist28% 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 (Yoshito, 2011). 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 it is 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 (WHO, 2013).

The Government of Kenya's 2009 National Road Map for accelerating the attainment of the MDGs Related to Maternal and Newborn Health in Kenya and the Child Survival and Development Strategy 2008 -2015, identified several barriers for improvement of prevention of mother to child transmission (PMTCT) services. The barriers include: lack of recognition of danger signs in pregnancy; poor accessibility and low utilization of skilled attendance during pregnancy, child birth and post birth period; among others. According to the Health Policy Paper of September 2012, only 40% of antenatal care (ANC) facilities currently offer PMTCT services. For the general population, 26% of women have un-met family planning needs. It further says that only 44% of women deliver babies under the care of a health professional (Republic of Kenya, 2009)

In Kenya, Comprehensive Public Expenditure Review 2013 indicates that maternal mortality rate deteriorated from 414 per 100,000 live births in 2003 to 488 deaths per 100,000 live births in 2008/09. Also, births attended to by skilled health personnel declined from 51% in 2007 to 43% in 2010/11. The Health Policy Paper of 2012 indicates that most maternal deaths are caused by hemorrhage during childbirth, HIV and AIDS, malaria, unsafe abortions and the low proportion of deliveries conducted by skilled birth attendants as well as poor staffing among other causes. According to the Research Agenda on Population and Development in Kenya (2006), each minute, a woman dies at childbirth in the developing countries. The report further says that in Kenya, childbirth claims many mothers daily (Republic of Kenya, 2009)

In their course of complementing government efforts in improving the lives of its citizen, non-governmental Organizations (NGOs) around the world have initiated and implemented various projects. In health sector for instance, NGOs have played a significant contribution in making available health services to the community, providing a critical source of much needed human and monetary resources by implanting the Maternal Healthcare Programmes. To a large extend however, the success of such projects has always depended on the monitoring and evaluation of the projects. The World Health Organization (2016) observes that monitoring progress to our goals and evaluating the impact of our interventions and actions are essential to improving performance and achieving results. Prabhakar (2012) also points out that monitoring and feedback is one of factors leading to project success. UNDP (2009) sums up the critical role of M&E by cautioning development practitioners that without effective planning, monitoring and evaluation, it would be impossible to judge if work is going in the right direction, whether progress and success can be claimed, and how future efforts might be improved.

Providing healthy maternal solutions through offering the prevention the residents need in disease avoidance as well as health maintenance. It gives the flu shots for old people as well as assisting the pregnancy mother assistance for reduction infant mortality. The baby regular checkups and immunizations are as well provided by the Maternal Healthcare Program. The Maternal Healthcare Program also plays a role in policy and standards development which addresses the health barriers experienced by the community in a bid of keeping them safe. Additionally, the government have come up with efficient measures of assisting in addressing the health difficulties particularly now when directorate has a huge monitoring and evaluating role in Maternal Health Program performance (Bourbonnais, 2013).

Linda Mama provides a package of basic health services accessed by all in the targeted population on the basis of need and not ability to pay, positioning Kenya on the pathway to Universal Health Coverage (UHC). A public funded health scheme that will ensure that pregnant women and infants have access to quality and affordable health services. Linda mama's goal is to "Achieve universal cases to maternal and child health services and contribute to the country's progress towards UHC". Linda Mama is a great step forward towards improving access and quality of maternal, new born and child health care services in the country as well as attainment of health goals as outlined in Kenya's Vision 2030 and the Sustainable Development Goals 1, 3 and 10 related to poverty, good health/wellbeing and reduction of inequalities (Micah & Luketero, 2017).

The redesigned initiative expands the network of health providers to include faith based facilities through a direct re-imbursement mechanism that pays for number of deliveries reported, to a health insurance plan to be administered by NHIF. The system is expected to improve efficiency, accountability and minimize complains associated with delays in disbursement of free maternity money. The benefit package includes both outpatient and inpatient services for the mother and newborn for a period of one year and it will include Antenatal Care, Delivery, Postnatal Care and Emergency referrals for pregnancy related conditions as well as complications (Mutungi, 2018).

Maternal mortality has reduced significantly since the abolishment of the maternity fee and introduction of Free Maternal Care Programme in public hospitals by President Uhuru Kenyatta in June 1, 2013. Kenya is the only country that has met 4 out 5 WHO nutritional goals. Stunting reduced from 35% to 26%, while exclusive breastfeeding improved from 32% to 61%. The under-five mortality has declined from 115 to 52 translating to 30,000 children's

lives saved. Neonatal mortality has also declined from 33 to 22 per 1000 live births over the same period. Vaccination coverage for fully immunized child has gone up to 76% from 68% in 2013/14. Maternal mortality has also dropped from 488 to 362/100,000. This represents 2000 mothers lives saved. Primary healthcare utilization has increased from 69% in the financial year 2013 to 77% in 2016 as a result of foregone user fees (Appleford, 2018).

1.2 Statement of the Problem

Many Kenyan women continue to have no access to or cannot afford for better primary healthcare needs and are forced to pay for the increasing healthcare cost burden, yet over 53% of Kenya's population lives under the poverty line. One of the most critical barriers to maternal health care in Kenya on a national scale is the lack of physical access to facilities, due to the insufficient number of facilities, distance to facilities, and inadequate transportation infrastructure. In fact, in replies to Kenya's 2008-2009 Demographic and Health Survey, the largest percentage (42%) of women who delivered outside a health facility did so because the facility was too far away or there was no transport to the facility, compared to only 17% who cited the cost of delivery as the key barrier (WHO, 2016).

The Linda Mama program is one that should see the utilization of the expanded benefits by all clients willing to be registered in the programme. However uptake of the programme despite the barrier of cost has being removed has not been as expected. The availability of the programme to the beneficiaries does not guarantee that the successful maternal healthcare delivery programme will be guaranteed due to various perceived factors that could be positive or negative (Mutugi, 2017). Lack of awareness on the importance of a certain healthcare delivery program or even their existence could influence the performance of the maternal health projects. Linda Mama project have also faced a challenge of insufficient funds and slow distribution of the funds that are available for the program. For instance a matron at Pumwani Maternity Hospital, noted that while the hospital used to charge Sh5, 000 for normal deliveries and Sh10, 000 for a caesarian, the government was reimbursing them at a flat rate of Sh5, 000 per delivery, creating a critical financial gap (ROK, 2015).

Various studies have been conducted related to maternal health projects. For instance, Wanjiru (2015) did a study on determinants of implementation of maternal-child health projects in Mombasa County, Kenya, Wandambwa (2018) examined the effect of stakeholders' management on health project performance for National Hospital Insurance Fund Kenya, Wausi (2018) did a study on perceived factors influencing uptake of linda mama maternal

healthcare delivery programme among women in informal settlements in Starehe Sub County, Kenya and Mwende (2016) examined the factors influencing delivery of maternal healthcare services in public healthcare facilities in Nairobi County, Kenya based on a case of Kenyatta National Hospital. In addition, Gitonga (2015) examined factors influencing the implementation of healthcare projects based on the case of Meru County, Kenya and Maina (2016) did a study on factors influencing effective implementation of health projects based on a case of AMREF Health Africa in Kenya. However, none of the reviewed studies focused on factors influencing performance of maternal health projects in Kenya focusing on a case of Linda Mama Project in Isiolo County, Kenya. Therefore, this study sought to bridge this gap by establishing the factors influencing performance of maternal health projects in Kenya focusing on a case of Linda Mama Project in Isiolo County, Kenya.

1.3 Purpose of the Study

The purpose of this study was to establish the institutional factors influencing performance of maternal health projects in Kenya focusing on a case of Linda Mama Project in Isiolo County, Kenya.

1.4 Objectives of the Study

The study sought to achieve the following objectives;

i. To determine how staffing influence performance of Linda Mama Project in Isiolo County, Kenya.
ii. To establish how financial resources influence performance of Linda Mama Project in Isiolo County, Kenya.
iii. To determine the influence of availability of hospital infrastructure on performance of Linda Mama Project in Isiolo County, Kenya.
iv. To access how project awareness influences performance of Linda Mama Project in Isiolo County, Kenya.

1.5 Research Questions

The study sought answers to the following questions;

i) To what extent does staffing influence performance of Linda Mama Project in Isiolo County, Kenya?
ii) How does financial resources influence performance of Linda Mama Project in Isiolo County, Kenya?

iii) How does availability of hospital infrastructure influence performance of Linda Mama Project in Isiolo County, Kenya?

iv) What influence does awareness of the project influence have on performance of Linda Mama Project in Isiolo County, Kenya?

1.6 Significance of the Study

Policy makers are expected to use this study to evaluate the impact of the government interventions on the main components of maternal health care services with an aim of improving the quality and access to maternal health care services in Kenya. The study therefore may be useful for evaluating existing policies that assists in developing clear and relevant policies that are aimed at reducing maternal mortalities and morbidities.

The study may also assist the government in budgeting process as it forms the basis of determining how resources should be allocated to our health deliveries with the aim of reducing maternal deaths while promoting economic growth and development.

Finally, with the implementation of free maternal health care in all government facilities, this study may assist policy makers in the jubilee government to develop a comprehensive policy framework to guide the implementation.

This study will be beneficial to scholars as it adds to the existing knowledge on performance of maternal health projects in Kenya, the main determinants of the demand of the maternal health care services and their role in development agenda. It also contributes to existing literature in addressing future research problems.

1.7 Delimitation of the Study

The study sought to establish factors influencing performance of maternal health projects in Kenya. The study focused on Linda Mama Project in Isiolo County, Kenya. The study specifically established the influence of staffing, financial resources, awareness of the project and availability of hospital infrastructure on performance of Linda Mama Project in Isiolo County, Kenya. There are only 19 health centers that offers Linda Mama services. The study collected data from the walk in walk out mothers attending maternal clinics and nurses in Isiolo County public hospitals. The study was carried out in a period of six months.

1.8 Limitations of the Study

The study anticipated encountering some limitations that might hinder access to information that the study sought. The respondents targeted in this study were reluctant in giving information fearing that the information being sought might be used to intimidate them or print a negative image about them. The researcher hoped to handle this by carrying an introduction letter from the University to assure them that the information they give was treated with confidentiality and was used purely for academic purposes. Further, the results of the study were limited to the extent to which the respondents were willing to provide accurate, objective and reliable information. The researcher checked for consistency and test the reliability of the data collected.

1.9 Basic Assumptions of the Study

The study assumed that there were no serious changes in the composition of the target population that might affect the effectiveness of the study sample. This study also assumed that the respondents were honest, cooperative and objective in the response to the research instruments and was available to respond to the research instruments in time. Finally, the study assumed that the authorities granted the required permission to collect data from their institutions.

1.10 Definition of Significant Terms Used in the Study

The following are the operational definitions of terms that was used throughout this study:

Maternal health project: This is a program that guarantees the health of women during pregnancy, childbirth, and the postpartum period. It offers the health care dimensions of family planning, preconception, prenatal, and postnatal care in order to reduce maternal morbidity and mortality.

Maternal Performance: This is the success in guaranteeing the health of women during pregnancy, childbirth, and the postpartum period.

Staffing: This is the process of hiring eligible candidates in the organization or company for specific positions. In management, the meaning of staffing is an operation of recruiting the employees by evaluating their skills, knowledge and then offering them specific job roles accordingly.

Financial Resources: These are assets of the project and are used to carry out the project activities, like paying salaries and buying medical supplies and equipment.

Project awareness: This is the knowledge and understanding of the existence of the maternal health project by the beneficiaries.

Availability of Hospital Infrastructure: This is the probability that a hospital infrastructures will be in an operable and committable state at the start of a mission when needed to be used.

1.11 Organization of the Study

This study is organized into five chapters. Chapter one contains the introduction to the study. It presents background of the study, statement of the problem, purpose of the study, objectives of the study, research questions, significance of the Study, delimitations of the study, limitations of the Study and the definition of significant terms. On the other hand, chapter two reviews the literature based on the objectives of the study. It further looks at the conceptual framework and finally the summary. Chapter three covers the research methodology of the study. The chapter describes the research design, target population, sampling procedure, tools and techniques of data collection, pre-testing, data analysis, ethical considerations and finally the operational definition of variables. Chapter four presents analysis and findings of the study as set out in the research methodology. The study closes with chapter five which presents the discussion, conclusion, and recommendations for action and further research.

CHAPTER TWO
LITERATURE REVIEW

2.1 Introduction

This chapter is a review of the work done by other researchers on challenges facing implementation of supply chain management in public hospitals. The review is based on the study where the emphasis lies on the extent to which factors such as staffing, financial resources, awareness of the project and availability of hospital infrastructure influence of maternal health project. Towards the end, the theoretical review and the conceptual framework is presented. Knowledge gap that has resulted to the need for this study is pointed out just before the presentation of a summary of the literature review.

2.2 Performance of Maternal Healthcare Projects

The definition of performance reviewed in this paper describes the concept in terms of achievement and fulfillment arising from an operation in relation to set goals (Acharya, Kumar, Satyamurti & Tandon, 2010). NGOs around the world have struggled with the question of accountability of their work. This is as a result of different informational demands that their work attracts from various stakeholders. Lewis and Kanji (2009) observe that accountability is a complex challenge for NGOs, because they have multiple constituencies and need to be accountable in different ways to a variety of different groups and interests. Ramadan and Borgonovi (2015) approves this view noting that governments are required to manage and evaluate their performance from multiple perspectives, considering the projects/programs performance, the agenda of donors, the needs of beneficiaries and the internal effectiveness. It is a situation that has raised concern on performance of maternal health projects from various stakeholders.

The performance of maternal healthcare projects can be measured by number of women delivered safely, number of women who die from pregnancy related complications, Linda Mama uptake levels, time frame for service delivery and meeting project goals and objectives. Performance of maternal health projects remains a major challenge in low-and middle-income countries (LMICs). In 2015, an estimated 303,000 women and young girls died from pregnancy and childbirth-related complications, with 99% of these deaths occurring in LMICs (Gitonga, 2017). Access to and availability of skilled health care workers (HCWs) throughout the maternal care continuum (antenatal, delivery, and postnatal), is necessary for reducing preventable mortality and improving quality of maternal health services. While efforts to

increase availability of health workers in low resource settings through training, task shifting, and retention programs have shown promise, there are concerns that health workers' performance remains suboptimal. This has also been linked to poor access to appropriate training and supervision and the know-do gap, the inability to apply acquired knowledge and skills. Therefore, while health workers may have been trained to perform assigned tasks, they sometimes underperform for a myriad of reasons including environmental, client, or provider-related This presents a significant challenge for effective decentralization of health services to the primary and secondary levels of care while maintaining quality care (Okungu, 2015).

In the inauguration of free MCH programmes in 2007, the government was faced with great hostility politically from the opposition; who saw the move as a scheme that was aimed at enticing voters to have the then president reelected into presidency for the second term. This resistance was hence great to the point that including the then Minister for Health hard joined the opposition in political ideologies (GOK, 2013) Politics has only been a small factor in determining and giving the direction for MCH programmes implementation in the country. The giant factor for influence has been availability of financial resources. The Kenyan budget has been constrained between development programmes, education and repayment of debts. In his Speech of 2009/2010, the then minister for finance-read a budget that allocated less for medical facilities compared to infrastructural development and other sectors of the economy. This has left almost 41% of the MCH units across the country constrained with budgets, meaning that the programmes lack proper medicine and equipment and they cannot hire experienced experts.

A healthy population is essential for higher productivity and sustained long term development of a nation. According to the report, the county health board has achieved notable progress, especially in controlling communicable diseases (tuberculosis, HIV/AIDS and malaria) and attaining marked decrease in child mortality, through the implementation of various MCH programmes across the county. A report by the KDHS (2009) from Kilifi County shows that Under Age 1year and Under Age 5year are42, 640 against 1,339,775 in Kenya and 197,364 against 6,518,230 respectively. This has left a gap in the central tendencies deviation from the required average in the number of survivals in Kenya between ages 1 to 5 years as the deviation is too big in the county from the country, leaving one wondering what could be the problem. A research done by the WHO (2016), shows that Kilifi County has been disadvantaged by over 67% in its quest of implementing the MCH programmes that could see the children and mothers of the county survive.

According to Alvarez, Gil, Hernandez & Gil (2009), lack of access to health care services for pregnancy and delivery are among the main reasons for high maternal and neonatal mortality rates worldwide. In resource-poor settings, the high cost of user fees for childbirths hinders access to skilled birth attendance, and highly contributes to maternal and neonatal mortalities. Nepal is one of the countries which has experimented with the Free Health Care Program and has one of the lowest maternal mortality ratios of about 320 deaths per 100,000 live births. According to WHO, UNICEF, UNFPA, The World Bank and the United Nations Population Division in their estimate on Trends in maternal mortality: 1990 to 2013, Nepal was ranked as being on track of achieving the MDG 5. One of the reasons for this achievement as cited by Adhikari (2013) in her working paper was the success of Nepal's Free Health Care Schemes whose aim is to provide universal free health services. However, according to the Ministry of Health and Population (2012), Nepal's skilled birth is still low at 35%.

2.3 Staffing and Performance of Maternal Healthcare Projects

Skilled healthcare professionals are in short supply across sub-Saharan Africa which strongly influences delivery of maternal healthcare services in healthcare facilities. For instance, WHO estimates that Tanzania should have a medical workforce of about 92,000 staff and the government even aspires to have approximately 140,500 skilled health workers by 2019. At present the country only has about 25,400 healthcare workers and one of the major contributing factors is the shortage of sufficient number of training programs. Tanzania has fewer than 100 training institutions which when put together produce fewer than 4,000 graduates annually. There is a need for selective hiring of qualified healthcare professionals as well as successful recruitment and retention processes of staff that should be tied to the empowerment package in the hospital operations as well as providing opportunities for advancement (Brown, 2013).

In Asia and sub-Saharan Africa, only one skilled attendant is available for every 300,000 people resulting in a ratio of one skilled attendant for every 15,000 births (MacDonald, 2012). In addition, a few incentives exist for skilled workers to work and live in rural areas, small urban areas and remote regions. Moreover, in some developing countries, skilled medical professionals are lured by higher incomes in western countries contributing to the overall brain drain of healthcare professionals from developing countries which immensely influence delivery of maternal healthcare services among others (Prytherch, Kakoko, Leshabari, Sauerbornv& Marx, 2012). Highly skilled physicians, nurses, administrators and in general the healthcare staff are critical to producing high-quality outcomes in delivery of maternal

healthcare services and quality improvement hence hospital growth. To improve efficiency and delivery of maternal healthcare services, public health facilities need to build the capacity of their staff through attracting and employing an adequate number of high-quality nurses to be able to achieve delivery of maternal healthcare services (Fox, Witter, Wylde, Mafuta & Lievens, 2013).

Women are often unable to access quality maternal healthcare services when they need them due to highly overburdened workforce in healthcare facilities. The government- managed healthcare facilities are under-financed and characterized by shortages of most basic essentials including a dire shortage of human resource where only 15 per cent of all Kenyan health workers providing maternal healthcare services have received any type of in-service training in treating delivery-related complications and yet 83 per cent of expectant mothers access the facilities during delivery. According to the Kenya Health Sector Strategic and Investment Plan (2008/2009), the current staff levels meet only 17 per cent of the minimum requirements needed for effective operation in a health system with 7 nurses per 4,000 residents contrary to World Bank recommendation of 14 nurses per 4,000 residents and therefore the sector is unable to provide maternity services appropriately to mothers (Nicole Bourbonnais, 2013).

Appropriate training and education of healthcare workforce is critical for delivery of maternal healthcare workforce because availability of enough qualified healthcare professionals is a necessary backbone for delivery of such services. Ethiopia is one of the countries with the least number of physicians in the world. Overall the current stock of physicians is 0.03 per 1,000 people which is insufficient to reach both national and international benchmarks and not close to the 0.55 doctors per 1,000 people required to achieve 80 percent of coverage of live births. Although intake of students into medical school has increased significantly in recent years, doctors much more than nurses tend to migrate abroad due to unfavorable working conditions and dissatisfaction with existing salary levels and lack of opportunities for further education and career development (Aninanya, 2017).

Globally, countries have faced challenges of staff remuneration and this has resulted into brain drain where healthcare professionals migrate to different areas in search for greener pastures. Poor remuneration is frequently cited as the primary cause of the shortage of human resources. Low levels of pay and allowances have a demotivating effect on existing staff as well as discouraging individuals from seeking employment in the public health service in most countries in Africa. Remuneration in the Malawian civil service is low even by regional

standards though the government recognizes that wages have been significantly eroded in real terms and therefore has developed a strategy for increasing the remuneration of civil servants over the medium term (Valentine, 2013). This strategy includes the consolidation of salaries and regular allowances as well as plans to simplify the grading and pay structure of healthcare workers. At the same time, the government has initiated a donor-financed programme for supplementing the salaries of public health professionals (Allen, 2013).

Many of the healthcare professionals in Kenya have migrated from rural areas to urban areas for the same reason hence contributing to the limited workforce in the country. This leads to serious challenges in terms of skilled labour loss as well as loss on government's investment through the subsidized education of their healthcare workers and in return influencing delivery of maternal healthcare services (Kirigai, 2006). The patient- healthcare provider relationship is a key pillar towards quality healthcare. A good and respectable relation encourages mothers to seek for maternal healthcare services and also ensures that services are delivered effectively to those who need them (Kalipeni, Semu & Mbilizi, 2012).

2.4 Financial Resources and Performance of Maternal Healthcare Projects

Healthcare financing has been critical even in the efforts to make UHC a reality. According to Morris and Parkin (2017) the commonly used sources of health-care financing are taxation, private insurance, Out of pocket (OOP) payments (direct payments) and social insurance. Out of pocket payments are charged at the point of health-care delivery. Private and social insurance play a vital role in reducing the barrier to access and spread the risk of ill health away from the household (ibid). As derived earlier as an egalitarian view, the notion to pay for health is that equal access to health care should be provided for those with equal need. The World Health Organization report (2010) emphasizes that timely access to health services is a mix of promotion, prevention, treatment and rehabilitation. Various government states are struggling to make UHC a reality among its citizens.

Every project requires financial resources if the project goals and set performance improvement is to be achieved. Research has produced a great deal of information about how dollars are distributed to projects. However, there is insufficient data in the research on how to put dollars to productive use (Rudasingwa, Soeters & Basenya, 2017). From recent studies, it is known that at least 80 percent of project budgets are spent at and within project sites for a wide range of services such as instruction, leadership, consultancy services, supplies, and materials (Namazzi, Peter, John, Olico, & Elizabeth, 2013). The remaining expenditures support the

administration office, tax collection, insurance coverage and operating costs. Donor funding has been playing a key role in the economies of developing countries especially in Africa. However, channelling of the resources has been going on for more than half a century but little development has been made in most of the recipients' countries in sub-Saharan Africa. Most of the 3rd world majority population live in abject poverty, suffer from diseases, experience rampant unemployment and are living heavily on debts. Non-governmental organizations and government development agencies have failed to account for the results of the funds from donors (Minjire, 2015).

In Kenya, the answer to this question is complicated by the fact that aid flow has not been consistent. Given Kenya's high dependence on foreign aid, coupled with major aid freeze episodes, there is need to analyses the extent the flow of donor aid influences health project implementation. A key challenge facing both the local and international community is how to ensure the effective delivery of foreign aid in poverty-reduction efforts around the world. Easterly (2013) argued "despite large amounts of foreign aid-and several countries that were able to utilize foreign assistance in their development and poverty-alleviation strategies, the effectiveness of foreign aid remains in doubt". Several surveys of the evidence conclude that aid has not led to increased growth and may have even worsened the economic performance of the countries receiving aid (Ear, 2013).

The sources and composition of project finance is another key factor that may influence the success of project implementation. Analysis on a number of researches has shown that sources of finance have a positive influence on projects. In his study, Kasoo (2010) reiterated in his findings that besides community participation, sources and composition of project finance has a bearing on project success as well. This was confirmed by Ayodele (2011) when he reported that one major cause of abandonment of construction projects in Nigeria was due to inadequate funding and finance. His study report further emphasizes the importance of financial resources in project implementation. The study is in consonance with Yang and Jackson's affirmation on the stalled pumped-hydro energy storage in the United States that financial uncertainties was the project's limiting factor (Yang & Jackson, 2011).

According to Roseland (2015) in a study on an evaluation of agricultural projects in Kenya by Development Bank revealed that the essence of capacity building is sustainability, but many of the barriers to sustainability have the same root cause: the inadequacy of local resources such as fund to support project activities after donor funds have been drawn down. According to

Asian Development Bank (ADB, 2014), there are three aspects of financial sustainability. These are the availability of adequate funds to finance project expenditures, especially funds drawn from the government budget, the recovery of some of the project costs from the project beneficiaries, and the financial incentive necessary to ensure participation .in the project. Consequently, a financial plan at constant financial prices is necessary to ensure there will be adequate funds to finance project expenditures. This applies to the implementation period to ensure capital funds are available to cover investment and working capital requirements, and to the operating period to ensure sufficient funds to cover operating expenditures. For indirectly productive projects that do not generate sufficient funds to cover operating expenditures, the full fiscal impact of the project for each year of its life should be calculated (Ear, 2013)

2.5 Availability of Hospital Infrastructure and Performance of Maternal Healthcare Projects

In their research on the challenges of meeting rural Bangladeshi women's needs in delivery Afsana *et al* (2010) argued that Bangladesh has for a long time wanted to be wealthy just like its neighbors and the only way to wealthy is by improving its infrastructural system. Therefore, Afsan argues that for any project to work, survive and give products, both the soft and hard infrastructure has to be put in place. Actually the major function of money in a project is to acquire either hard or soft infrastructure. According to Ghose, Feng and Feng (2017) infrastructural facilities like maternal wards, delivery wards/theater rooms, electricity, clean piped water and many more makes the health process aimed at sustaining the lives of the unborn and their mothers in Kenya. However, despite the fact that there is variety of literature, our research will limit itself to three infrastructural facilities that determine the implementation of MCH projects in the county and these are: The structures that are the maternal wards, the power that operated the machines, and, the clean sanitized water (Mahapatra & Sahoo, 2015).

Kenyan public health facilities have long suffered from insufficient infrastructure and equipment. Recent survey data found that only 36% of public health facilities offering delivery services had 20 all the basic delivery room infrastructure and equipment needed with rural areas and lower level facilities particularly ill-equipped to handle deliveries and emergences associated with giving birth (KNBS and ICF Macro, 2013). A report published by the Kenya National Bureau of Statistics (2009) indicates that the population increase in the country has put pressure on all round available facilities. Among the affected in the report are the schools whereby the beds in public universities like UON, KU, and JKUAT etc. were filled beyond the

limits forcing universities to develop new hostels like the Nyayo 5 and 6 in KU, modern hostel in UON campus-underway etc. This trickled down to other areas though the most hit is the health sector. According to Magadi, Agwanda and Obare (2011) the health system in Kenya needs more rooms-more and more hospital wards need to be erected-to accommodate the increasing population. However, a challenge still exists in the construction of wards in new hospitals or the old ones. The Kenya government only allocates

Many public healthcare facilities in third world countries continue to face challenges that directly influence delivery of maternal healthcare services to mothers. Many countries have therefore opted to advocate for decentralization of services to drive health sector reforms with a focus on maximizing on the existing resources within their context and environment (Celik, 2010). In the course of the 1980s any progress that was being made in health development and in public healthcare provision in post-colonial sub-Saharan Africa faltered in a setting of economic recession, financial indebtedness, structural adjustment measures and political instability (Kim, Farmer, & Porter, 2013).

Access to information is critical in ensuring that mothers seek maternal healthcare services and this is because the kind of information available deter or captivate mothers to seek such services. Previous literatures show that appropriate information on maternal education has a positive correlation to delivery of maternity care services. Communication therefore becomes an important aspect to delivery of services as it ensures that uptake of such services is smooth while achieving patient satisfaction. There is a need to educate women on pregnancy, monitor their own health and that of their children, follow up with medical check-ups, critical updates and post-delivery support through the appropriate channels of communication accessible to them (Addai, 2015).

In the United States of America, research shows that women who were informed and educated on maternal healthcare services were most likely able to seek such services in a health facility as well as adopt the appropriate maternal healthcare practices and interventions. The Level of education of the women also increases their ability to understand the maternal education whereby, women of higher level of education exhibit increased ability to understand the information passed to them by the healthcare institutions and consequently are able to take up the maternal care services in healthcare facilities. The knowledge of mothers on maternal issues plays a critical role on their utilization and delivery of maternal healthcare services (Leslie & Gupta, 2009).

A research study carried out in Australia in 2009 also showed that women who utilized and preferred to use public funded maternal healthcare services were outlined to be well informed on the meaning and importance of maternal care, they knew what it meant by normal delivery and also recognized the complications that were likely to arise when deliveries were 18 administered by unqualified personnel. On the other hand, women who did not utilize the maternal care services had a low understanding of these issues and its importance (Teate, 2011).

Women as well as their families need to possess the right information about maternal healthcare services from various facilities around them that offer such services, any cost implications to such services as well as the importance of seeking skilled support during pregnancy and thereafter. This information enables them and those concerned to make informed decisions. Health education programmes and sessions during antenatal clinic should also be provided to inform the women about reproductive health, knowledge related to sexuality, nutrition, family planning among others (Lesser & Soya Barnett, 2013).

Numerous studies have shown that lack of adequate information about maternal healthcare service, laboratory tests results and dangers of late bookings or not attending ANC services at all are some of the contributing factors to poor delivery and uptake of maternal healthcare services due to information deficit. Inadequate information about these services and their benefits to the mother's and the infant's health may also negatively influence the utilization of maternal healthcare services. Sometimes pregnant women may not know the implication related to poor or non- utilization of maternal healthcare services (Leslie and Gupta, 2009).

In Kenya, a study explored the effects of 'Kangaroo Mother Care' training on information, attitude and practice of healthcare providers in selected district hospitals in North Rift Region and it was realized that with increase in knowledge about the Kangaroo mother care services training, women were engaged more in breast feeding and other postnatal care services such as regular visits to the healthcare facilities (Joy, 2015) and this is return influences delivery of maternal healthcare services. Leadership and management of healthcare facilities on delivery of maternal healthcare services is fundamental. The management team is critical in administration of healthcare and in ensuring that services are appropriately utilized and this influences delivery of maternal healthcare (Appleford, 2018).

Resource management is critical for healthcare services delivery. Sachs states that service delivery is an immediate output of the input into the health systems and these include health workforce, supplies and finances and so increased input should lead to improved services.

Ensuring availability and access to maternal healthcare services is one of the main functions of healthcare systems. However, this has been an obstacle to other functions that contribute to delivery of maternal healthcare services especially in developing countries (Sachs, 2011). The need to adopt enlightened approach to resource management in service delivery is important. In particular, there is a need to distinguish good costs that improve institutional capabilities and quality maternal healthcare service delivery from costs that increase bureaucracy hence becoming obstacles to delivery of such services (Sun, 2015). Insufficient and slow distribution of the resources available for maternal healthcare interventions and programs could also create intense challenges and setbacks in achieving the right maternal outcomes. Although some public healthcare facilities in Kenya have reportedly been provided with extra capital to cover the influx of deliveries, others have remained in uncertain circumstances of how to balance the free maternity care policy and their need to cover costs (Matua, 2014).

2.6 Awareness of the Project and Performance of Maternal Healthcare Projects

The performance of maternal health projects may not necessarily be pegged on the quality of the health services but also awareness of existence of the programs (Voller & Becker, 2014). Moreover, these women need to know the need of them registering or enrolling to any maternal healthcare projects. They also need to understand the consequences that might arise from them not been registered in a maternal health care delivery projects. Behaviour change for women in informal settlements can be fostered through health education (Cook, Andrade & Paul, 2014).

Most women from informal settlements who attend the clinics or other services offered through the project are casual laborers or are in other informal employment arrangements. Their lack of understanding of opportunity cost may be a hindrance to uptake of the maternal health care delivery project. Some employers can allow the women to take time off needed to enrol for the clinic and attend the required clinics, provided they can demonstrate attendance, but this is mentioned as rare in many cases (Wausi, 2018). Some women also see identification process of the user as cumbersome. Channeling of health messages through a mixture of avenues such as community radios, community meetings, outreach activities, posters and leaflets could enable a wider reach and continued uptake of maternal healthcare delivery projects for women living in informal settlements (Chuma & Maina, 2013).

The lack of community outreach projects has a significant bearing on uptake of maternal health care delivery projects. Word of mouth however does play a role in uptake of maternal health

care delivery projects by women in informal settlements when the woman has a virtuous reputation. In other cases the women are considered by the community as not been service oriented (Concern Worldwide, 2013). Community engagement and sensitization are powerful ways of creating health awareness on the risks and benefits of the maternal health care delivery projects. Awareness of the projects among women in informal settlements needs to be considered as they form a larger part of the population and it is for this reason they should be the first target (Mbuthia, 2015).

Registration and recording of women into the projects should be more aggressive unlike currently where NHIF mostly reaches people in the formal sector. 12 Planners of health care delivery projects need to know the power of reliable reproductive health information while rolling out maternal health care delivery projects (Uneke, Ndukwe, Ezeoha, Urochukwu & Ezeonu, 2014). In addition, the perception of women on these delivery projects matters, affects, and are critical in the fight towards sustainability in maternal healthcare projects. Responding to their views could help fostering behavior change. A relationship exists between source of information and the uptake of maternal health care delivery projects (Essendi, Mills and Fotso, 2010).

2.7 Theoretical Framework

A theoretical framework provides the researcher the lens to view the world. The theoretical framework relates to the philosophical basis on which the research takes place and forms the link between the theoretical aspects and practical components of the problem under investigation. In this study the theoretical framework consists of theories and models related to the present study. It is in this framework where the research problem under study evolved. The theoretical framework discusses the Resource dependency Theory (RDT), stakeholders' management theory, empowerment theory and optimal resource allocation theory.

2.7.1 Resource dependency Theory (RDT)

Resource Dependence Theory was advanced by Pfeffer and Gerald R. Salancik in 1970s. It studies how external resources of organizations affect the behavior of an organization. It is based on the notion that environments are the source of scarce resources and organizations are dependent on these finite resources for survival. Organizations must develop ways to exploit these resources, which are also being sought by competing organizations in the same environment. It also postulates that resources are a basis of power for the organizations –

organization A's power over organization B is equal to organization B's dependence on organization A's resources (Scott, 2013).

The basic assumption of RDT is ensuring organizational survival by minimizing any situation of uncertainty and dependency and characterizes an organization as an open system, dependent on contingencies in the external environment (Pfeffer & Salancik, 1978). However, managers are able to reduce the environmental uncertainty and dependency by several actions, where the concept of power is the central stage. The RDT is built on several earlier scholars, including the work of Emerson (1962), Blau (1964), and Jacobs (1974). The concept of analyzing organizational behaviour from an organizational context perspective being a part of the RDT has also been used by earlier scholars.

Pfeffer and Salancik (1978) started their work with the introduction of the concept of a contextual perspective, including three concepts: organizational effectiveness, organizational environment, and constraints. This section addresses the core variables used in the RDT, discussing the impact of the concepts of dependency and uncertainty. The first concept of the contextual perspective is the organizational effectiveness, being defined as the effectiveness of an organization with the ability to create acceptable outcomes and actions In addition, organizational effectiveness can be described as an external standard, judging to what extent an organization is able to meet the demands of their stakeholders, including various groups and organizations concerned with the activities of the organization.

The concept of constraints describes how probable it is that an action will be used to respond to a given situation. If one response is more probable than another response to a situation, this action is constrained. In other words, a constraint is present whenever a response to a situation is not a random, but a well-argued choice. Some examples on how behaviour is constraint include: physical realities, social influence, information, cognitive capacity, and personal preferences. The concept of constraints assumes that the individual effect on organizational behaviour is frequently constrained by situational contingencies. The three concepts of the contextual perspective serve as a core model to the RDT (Pfeffer & Salancik 1978). This theory is relevant to this study as it highlights how staffing influence performance of Linda Mama Project in Isiolo County, Kenya.

2.7.2 Optimal Resource Allocation Theory

Developed by Laska, Meisner and Siegel (1972) the theory of Optimal Resource Allocation is based on the premise that tasks possessing a homogenous distribution of service times are risk

of collapsing when resources are not uniformly allocated. In advancing the theory, they contend that the resource is required to perform a number of tasks by the source and that the source is glamorized with the assumption that it does possess at any given time capacity to randomly allocate fractional proportions of its service resources to one or more of its projects. It is however required of the source to adopt strategies that will ensure that the apportionment of the resource is done in an optimal way that would enhance task completion time and decrease chances of project collapse (Laska, 2012).

In adopting this theory, this study contends that for successful maternal health projects the existence of reliable strategies that would enhance an optimal allocation of financial resources for health (HRH) is a requirement (Keshtkar, et al., 2015). This theory relates to study variable distribution of financial resources which advances that without proportionate allocation of financial resources to cater for medical supplies and salaries for doctors, physicians, nurses and midwives, the performance of maternal health projects would be adversely influenced.

2.7.3 Empowerment Theory

The Empowerment Theory was developed by Julian Rappaport (1981). Fawcett, et al., (1995) proponents of the empowerment theory in the provision of health care advance that, there exist complementary influences that guide partnerships among different stakeholders in this public services sector. In this vein, they contend that for effective implementation of health care projects there must be an interactive empowerment process that incorporates; collaborative planning, governing, community action, capacity building and community change (Fawcett, et al., 1995). On his part, Perkins and Zimmerman (1995) argued that collaborative empowerment is a responsive process that engages civil society organizations and other grant making organizations to bring about societal change that addresses community concerns such as health care.

This takes the form of collaborative partnerships which borrow the principle of community participation through which partners with a common goal implement projects that affect the lives of local populations (Perkins & Zimmerman, 2013). In adopting this theory, this study contends that collaborative partnerships are essential for effective implementation of health care projects (Butterfoss, Goodman & Wandersman, 2013). This theory relates to study variable availability of hospital infrastructure and it empowers the beneficiaries to access the Linda Mama Project in Isiolo County, Kenya.

2.7.4 Stakeholders' Management Theory

The Stakeholders' Management Theory was advanced by Dr. F. Edward Freeman in 1984. It addresses morals and values in managing an organization. PMBOK, (2013) defines stakeholder as any individual(s), group(s) or organization(s) involved and affected by the project activity or its outcome. The stakeholder's in a project come together to maximize benefits to the clients thus, Stakeholder's benefits are the driver for the project, (Cooke-Devis et al, 2006). For the project to succeed all the stakeholders must cooperate. Freeman, 1999 defines cooperation as the formation of relationships that occur between the projects stakeholders. It is a complex network comprising all the stakeholders around the project. They form a common project environment, a sphere of influence and support on which projects depend for its very existence and success (Gibson, 2012).

Each and every stakeholder must understand the directions of this sphere of influence and operate under the same sphere influence to attain success. This is practical through better informational conveyance and understanding between organizations dealing with the NHIF out-patient medical scheme (Mahapatra & Sahoo, 2015). The descriptive aspect of stakeholder theory reflects and explains past, present and future states of affairs of organizations and their stakeholders. The theory stipulates in deep understanding the relevance of stakeholders in creating awareness among the Linda Mama project beneficiaries.

2.8 Conceptual Framework

The purpose of this study is to determine to what levels the dependent variable relies on the independent variables. The conceptual framework is usually to illustrate how the system of concepts, expectations, beliefs, assumptions and theories informs and support the research and forms a key part of the research design. In this study, the dependent variable is the Performance of maternal health projects while the Independent variables include staffing, financial resources, awareness of the project and availability of hospital infrastructure. The conceptual framework illustrates diagrammatically how these variables relate to each other

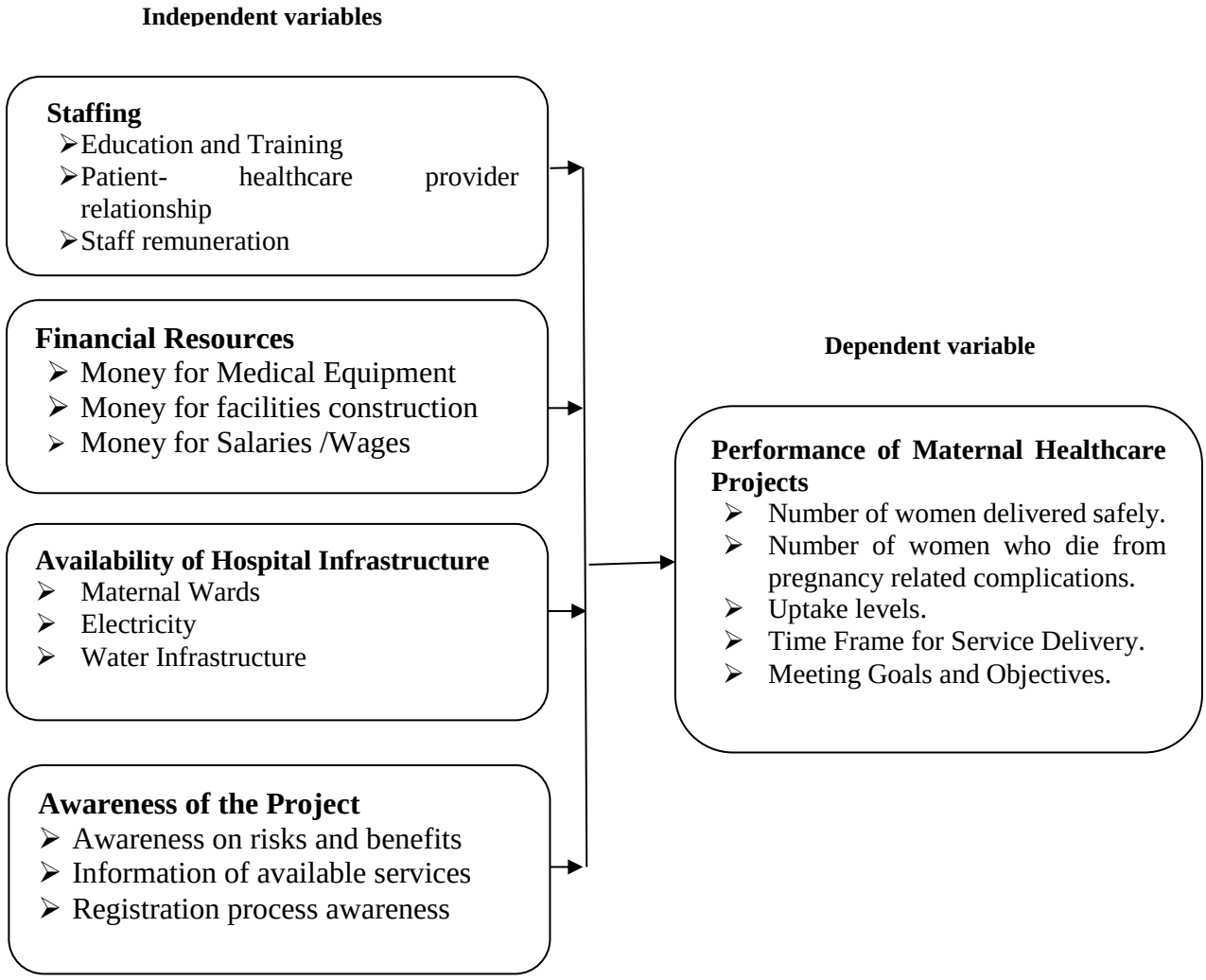

Figure 1: Conceptual framework on the challenges facing implementation of supply chain management in public hospitals.

2.9 Knowledge Gap

Various studies have been conducted related to maternal health projects. These are illustrated in Table 2.1.

Table 2. 1: Summary and Research Gaps

Author	Topic	Methodology	Findings	Research gaps
Wanjiru (2015)	Determinants of implementation of maternal-child health projects in Mombasa County, Kenya.	Cross sectional descriptive survey design was utilized with a questionnaire as the data collection instrument.	The study shows that the County Government of Mombasa has not developed modern, well equipped maternities and child welfare clinics. Infrastructure development has been cited as a key stimulant of health services uptake	The study did not highlight the institutional factors influencing performance of Linda Mama Project in Isiolo County, Kenya that this study seeks to establish.
Gitonga (2015)	Factors influencing the implementation of healthcare projects based on the case of Meru County.	The study employed descriptive survey research design	The study concludes that benchmarking is an important learning tool for medical personnel in enhancing of quality standards in health care provision, that adequate financial resources disbursed in good time are key drivers of the implementation of health care projects in Meru County.	The study did not highlight the institutional factors influencing performance of Linda Mama Project in Isiolo County, Kenya that this study seeks to establish.
Maina (2016)	Factors influencing effective implementation of health projects based on a case of AMREF Health Africa in Kenya	A descriptive survey research design was adopted, with AMREF Health Africa in Kenya being the focus organization	The study noted that the most influential factor in creating donor confidence in funding was the financial accountability, as good financial propriety demonstrated commitment to standards and work ethics	The study did not highlight the institutional factors influencing performance of Linda Mama Project in Isiolo County, Kenya that this study seeks to establish.
Wandambwa (2018)	Effect of stakeholders' management on health project performance for	A descriptive survey research design was adopted with the target population of 324	There exists a negative linear relationship between project performance and stakeholder's	The study did not highlight the institutional factors influencing performance of

	National Hospital Insurance Fund Kenya	stakeholders who are involved in NHIF outpatient medical scheme	interests(r = -.642) while a positive linear relationship between project performance and the way at which stakeholders communicate (r= .635), between project performance and stakeholders engagement (r = .862) and between project performance.	Linda Mama Project in Isiolo County, Kenya that this study seeks to establish.
Wausi (2018)	Perceived factors influencing uptake of linda mama maternal healthcare delivery programme among women in informal settlements in Starehe Sub County, Kenya	The study adopted a descriptive survey research design.	The researcher found out that majority of women in Mathare slums are satisfied with Linda Mama services including the healthcare. However, their perception on the speed and efficiency of service delivery under the programme was evenly spread with mixed reactions.	The study did not highlight the institutional factors influencing performance of Linda Mama Project in Isiolo County, Kenya that this study seeks to establish.
Mwende (2016)	Factors influencing delivery of maternal healthcare services in public healthcare facilities in Nairobi County, Kenya based on a case of Kenyatta National Hospital	The study was linked to realism theory. The target population was drawn from KNH Maternity wing which include 340 mothers, 30 nurses, 10 doctors and 15 biomedical engineers.	The study revealed that based on healthcare workers perspective, patients' background factors especially cost influences delivery of maternal healthcare services in the hospital.	The study did not highlight the institutional factors influencing performance of Linda Mama Project in Isiolo County, Kenya that this study seeks to establish.

2.10 Summary

This chapter discussed the existing literature on factors influencing performance of maternal health projects in Kenya in accordance with the objectives. Health project Performance is a vital element for any national growth and development. With the current globalization programs and varied issues health is of concern to all individuals. Maternal health refers to the health of women during pregnancy, childbirth, and the postpartum period. It includes the health care dimensions of family planning, preconception, prenatal, and postnatal care in order to reduce maternal morbidity and mortality.

Skilled healthcare professionals are in short supply across sub-Saharan Africa which strongly influences delivery of maternal healthcare services in healthcare facilities. Healthcare financing has been critical even in the efforts to make UHC a reality. Every project requires financial resources if the project goals and set performance improvement is to be achieved. The performance of maternal health projects may not necessarily be pegged on the quality of the health services but also awareness of existence of the programs. Most women from informal settlements who attend the clinics or other services offered through the project are casual laborers or are in other informal employment arrangements. Their lack of understanding of opportunity cost may be a hindrance to uptake of the maternal health care delivery project. Some employers can allow the women to take time off needed to enroll for the clinic and attend the required clinics, provided they can demonstrate attendance, but this is mentioned as rare in many cases. This study seeks to factors influencing performance of maternal health projects in Kenya focusing on a case of Linda Mama Project in Isiolo County, Kenya.

CHAPTER THREE
RESEARCH METHODOLOGY

3.1 Introduction

Research methodology is the approach by which the meaning of data is extracted and is a continuous process. The research methodology gives the direction to follow to get answers to issues that are of concern. This chapter describes the methods used to gather information on the area of the study. The chapter guided the research methodology to be used in carrying out the study. The chapter presents details of the research design, target population, sampling procedures, methods of data collection, validity and reliability of instruments, data collection process, methods of data analysis and ethical considerations while conducting the study.

3.2 Research Design

The study used a cross- sectional descriptive research design which sought to explore the factors influencing performance of maternal health projects in Kenya. A cross-sectional descriptive study was a research tool used to capture information based on data gathered for a specific point in time and is appropriate where the overall objective is to establish whether significant associations among variables exist at some point in time (Lewis, 2015). Cross sectional descriptive study design was selected for this study due to its ability to minimize biases and maximization of the reliability of evidence collected. This study involved collection of quantitative data for objective testing while qualitative was useful in explaining themes of descriptive information. Both qualitative and quantitative data from the identified population were used which were critical for triangulation of the study findings.

3.3 Target population

A Population is the entire group of persons or elements that have at least one thing in common. It is the mass of individuals, cases, events to which the statements of the study refers and which has to be delimited unambiguously beforehand with regard to the research question. According to Meyers, Gamst and Guarino (2016), a population is the total collection of elements about which we wish to make inferences. The population under consideration which is the unit of analysis comprises of Antenatal nurses, Mothers attending clinics and Project managers in Isiolo County as shown in Table 3.1.

Table 3. 1: Target Population

Category	Target population
Antenatal nurses	241
Mothers attending clinics	367
Project managers	38
Total	**646**

3.4 Sample size and Sampling Procedures

Sampling is a deliberate choice of a number of people who are to provide the data from which a study drew conclusions about some larger group whom these people represent. The section focuses on the sampling size and sampling procedures.

3.4.1 Sampling Size

The sample size is a subset of the population that is taken to be representatives of the entire population (Wang, 2015). A sample population of 86 was arrived at by calculating the target population of 646 with a 95% confidence level and an error of 0.05 using the Nassiuma (2000) formula as shown;

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

Where ***n***= sample size

N = population (646)

Cv= Coefficient of variation (take 0.6)

e= tolerance of desired level of confidence (take 0.05) at 95% confidence level)

$$n = \frac{646(0.6^2)}{0.6^2 + (646-1)0.05^2} = 117.9 \text{ (Rounded off to 118)}$$

Table 3. 2: Sampling Frame

Category	Target population	Ratio	Sample size
Antenatal nurses	241	0.183	44
Mothers attending clinics	367	0.183	67
Project managers	38	0.183	7
Total	**646**		**118**

3.4.2 Sampling Procedures

Sampling is the process of selecting a number of individuals or objectives from a population such that the selected group contains elements representative of the characteristics found in the entire group. The study selected the respondents using stratified proportionate random sampling technique. Stratified random sampling is unbiased sampling method of grouping heterogeneous population into homogenous subsets then making a selection within the individual subset to ensure representativeness. The goal of stratified random sampling is to achieve the desired representation from various sub-groups in the population. In stratified random sampling subjects are selected in such a way that the existing sub-groups in the population are more or less represented in the sample (Yin, 2017). The study used purposive sampling to pick the respondents in each stratum.

3.5 Research Instruments

Data collection instrument is used in research to refer to a device that specifies and objectifies the data collecting process, instruments are usually written and may be given directly to the subject to collect data or may provide objective description of the collection of certain types of data. Primary data was obtained using self-administered questionnaires. The question had two sections; Part A having question on background information and Part B have questions on factors influencing performance of maternal health projects. The questionnaire is made up of both open ended and closed ended questions. The open-ended questions were used so as to encourage the respondent to give an in-depth and felt response without feeling held back in illuminating of any information and the closed ended questions allow respondent to respond from limited options that had been stated. According to Wang (2015), the open ended or unstructured questions allow profound response from the respondents while the closed or structured questions are generally easier to evaluate. The questionnaires was used in an effort to conserve time and money as well as to facilitate an easier analysis as they are in immediate usable form.

3.5.1 Pilot Testing

Pilot study is the measurement of a dependent variable among subjects. Its purpose is to ensure that items in the instrument are stated clearly and have the same meaning to all respondents. The purpose of pre-testing the data instrument is to ensure that the items in the instrument are stated clearly and have the same meaning to all respondents. In this study this involved checking whether the questions are clear and revoking any positive or negative response (Wang, 2015). Pilot testing of the research instruments were conducted where 12

questionnaires were administered to the pilot survey respondents who were chosen at random representing 10% of the sample size. After one day the same participants were requested to respond to the same questionnaires but without prior notification in order to ascertain any variation in responses of the first and the second test. This is very important in the research process because it assists in identification and correction of vague questions and unclear instructions. It is also a great opportunity to capture the important comments and suggestions from the participants. This helped to improve on the efficiency of the instrument. This process was repeated until the researcher is satisfied that the instrument does not have variations or vagueness.

3.5.2 Validity of Research Instruments

Validity refers to how the questions in the instruments are phrased in terms of clarity to ensure that uncertainty or doubts are eliminated. In other words, validity is concerned with whether the findings are really the reality on the ground. Content related validity was used for this particular study specifically construct validity to ensure that the instruments measured what they intend to measure in the study. Validity of the instruments were also maintained by articulately including the research objectives into the questionnaire and reviewing the instruments intensely with the supervisor to ensure that the most appropriate indicators that measured the variables were included into the study. The study also sought opinion of the experts in the field of maternal healthcare. Validity is critical in any given study for it ensures integrity of the conclusions that are generated from any given research. It is also concerned with whether or not the items actually provide the intended information.

3.5.3 Reliability of Research Instruments

Reliability of a measure indicates the extent to which it is without bias (error free) and hence ensures consistent measurement across time and across the various items in the instrument. It is an indication of the stability and consistency with which the instrument measures the concept and helps to assess the "goodness" of measure (Dwork, *et al*., 2015). Reliability is concerned with the question of whether the results of a study are repeatable. The questionnaire was administered to a pilot group of 16 randomly selected respondents from the target population and their responses used to check the reliability of the tool. Reliability of the data collection instrument was done using the split half method then be calculated using Spearman Brown correlation formulae to get the whole test reliability. If the sum scale is perfectly reliable, we expected that the two halves are perfectly correlated. A construct composite reliability co-

efficient of 0.7 or above, for all the constructs, is considered to be adequate for this study (Rousson, Gasser & Seifer, 2012).

3.6 Data Collection Procedures

The study used primary data which was collected by use of questionnaires; use of questionnaires is based on the fact that they are suitable for a descriptive study given that they are easy to administer, ensure fast delivery and the respondent can answer at their convenience. The questionnaires were self- administered through drop and pick later method. The researcher delivered the questionnaire and give the selected respondent a maximum of 3 days after which the researcher collected the completed questionnaire for analysis. The researcher also assured the participants that the information they give was treated with strict confidentiality. An envelope marked questionnaire and thesis topic was provided so that once the employee completes the questionnaire, they sealed it to ensure confidentiality is maintained within the organization and guarded against potential victimization by the human resource division or the person designated by the company to co-ordinate the process. The researcher then proceeded to administer the questionnaires through the designated officers and co-ordinate with them to ensure respondents have adequate time to complete them. This enabled create a conducive environment for the distribution and administration of the questionnaire. Administration of the questionnaire followed the agreed schedule.

3.10 Data Analysis Techniques

Data was analyzed using Statistical Package for Social Sciences (SPSS Version 25.0). All the questionnaires received were referenced and items in the questionnaire was coded to facilitate data entry. After data cleaning which entailed checking for errors in entry, descriptive statistics such as frequencies, percentages, mean score and standard deviation was estimated for all the quantitative variables and information presented inform of tables. The qualitative data from the open-ended questions were analyzed using thematic content analysis and presented in narrative form. Thematic analysis is a method of analyzing qualitative data. It is usually applied to a set of texts, such as interview transcripts. The researcher closely examines the data to identify common themes – topics, ideas and patterns of meaning that come up repeatedly.

Inferential data analysis was done using multiple regression analysis. Multiple regression analysis was used to establish the relations between the independent and dependent variables. The multiple regression model is chosen because it is useful in establishing the relative importance of independent variables to the dependent variable (Wang, 2015). Such importance

is deduced from standardized regression coefficients (beta-weights), whose magnitudes show how much relative impact the independent variables have on the dependent variable, while the negative and positive signs associated with the coefficients show negative and positive impacts respectively (Park, 2008). Also, it is ideal for the dependent variable to be recorded at a continuous level of measurement**.** This study the multiple regression model generally assumes the following equation;

$$\boldsymbol{Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \varepsilon}$$

Where: -

Y= Performance of maternal health projects

β_0=constant

$\beta_1, \beta_2, \beta_3 \beta_4$ and β_5 = regression coefficients

X_1= Staffing

X_2= Financial resources

X_3= Awareness of the project

X_4= Availability of hospital infrastructure.

ε=Error Term

A One-Way ANOVA was used to test the fitness of the model. The basic principle of ANOVA is to test for differences among the means of the populations by examining the amount of variation within each of these samples, relative to the amount of variation between the samples (Kothari, 2012). Specifically, one-way (or single factor) ANOVA is a way to test the equality of three or more means at one time by using variances (Wang, 2015). The Levine's homogeneity of variance test with p value < 0.05 was interpreted to mean the ANOVA test results are significant and the study rejected the null hypothesis if computed F>F critical at 95% confidence interval (Freedman, 2010). The value for the F-statistic was applied in determining the robustness of the model.

3.11 Ethical Considerations

The researcher observed the following standards of behavior in relation to the rights of those who become subject of the study or are affected by it: First, in dealing with the participants, they were informed of the objective of the study and the confidentiality of obtained information, through a letter to enable them give informed consent. Once consent is granted, the participants maintained their right, which entailed but is not limited to withdraw or decline to take part in some aspect of the research including rights not to answer any question or set of

questions and/or not to provide any data requested; and possibly to withdraw data they have provided. Caution was observed to ensure that no participant is coerced into taking part in the study and, the researcher seeks to use minimum time and resources in acquiring the information required. Secondly, the study adopted quantitative research methods for reliability, objectivity and independence of the researcher. While conducting the study, the researcher ensured that research ethics are observed. Participation in the study was voluntary. Privacy and confidentiality was also observed. The objectives of the study were explained to the respondents with an assurance that the data provided was used for academic purpose only.

3.12 Operationalization of Variables

The operationalization of variables is shown in Table 3.3.

Table 3. 3: Operationalization of variables

Objectives	**Type of Variable**	**Indicator**	**Measuring of Indicators**	**Tools of analysis**	**Type of analysis**
To determine how staffing influence performance of Linda Mama Project in Isiolo County, Kenya.	Independent	Staffing	• Education and Training • Patient- healthcare provider relationship • Staff remuneration	Percentages Mean score	Descriptive statistics Regression analysis
To establish how financial resources influence performance of Linda Mama Project in Isiolo County, Kenya.	Independent	Financial Resources	• Money for Medical Equipment • Money for facilities construction • Money for Salaries /Wages	Percentages Mean score	Descriptive statistics Regression analysis
To access how project awareness influences performance of Linda Mama Project in Isiolo County, Kenya.	Independent	Awareness of the project	• Awareness on risks and benefits • Information of available services • Registration process awareness • Access to information	Percentages Mean score	Descriptive statistics Regression analysis

To determine the influence of availability of hospital infrastructure on performance of Linda Mama Project in Isiolo County, Kenya.	Independent	Availability of hospital infrastructure	• Maternal Wards • Electricity • Water Infrastructure	Percentages Mean score	Descriptive statistics Regression analysis
	Dependent	Performance of Maternal health project	• Number of women delivered safely. • Number of women who die from pregnancy related complications. • Uptake levels. • Time Frame for Service Delivery. • Meeting Goals and Objectives	Mean score	Descriptive statistics Regression analysis

CHAPTER FOUR

DATA ANALYSIS, PRESENTATION AND INTERPRETATION OF FINDINGS

4.1 Introduction

This chapter discusses the findings obtained from the primary instrument used in the study. It discusses the characteristics of the respondents and their opinions on the factors influencing performance of maternal health projects in Kenya focusing on a case of Linda Mama Project in Isiolo County, Kenya. The researcher provided tables that summarized the collective reactions of the respondents.

4.2 Response Rate

Questionnaires that the researcher administered were 118 out of which only 84 fully filled questionnaires were returned. This gave a response rate of 71% which was within what Meyers, Gamst and Guarino (2016) prescribed as a significant response rate for statistical analysis and established at a minimal value of 50%.

Table 4. 1: Response Rate

		Response Rate
Response	84	71%
Non-response	34	29%
Total	**118**	**100**

4.3 Reliability Analysis

Reliability analysis was subsequently done using Cronbach's Alpha which measures the internal consistency by establishing if certain items within a scale measure the same construct. Dwork, *et al*. (2015) established the Alpha value threshold at 0.7, thus forming the study's benchmark.

Table 4. 2: Reliability Analysis

	Alpha value	**Comments**
Staffing	0.771	Reliable
Financial resources	0.818	Reliable
Awareness of the project	0.714	Reliable
Availability of hospital infrastructure	0.737	Reliable

Cronbach Alpha was established for every objective which formed a scale. The findings in Table 4.2 illustrates that all the four variables were reliable as their reliability values exceeded the

prescribed threshold of 0.7, Dwork, *et al*. (2015). This, therefore, depicts that the research instrument was reliable and therefore required no amendments.

4.4 Demographic Information

This section required the respondents to indicate their general information including gender, highest education level and age of the respondents. This general information is presented in form tables.

4.4.1 Gender of the Respondent

The respondents were requested to indicate their gender. The findings were as illustrated in Table 4.3.

Table 4. 3: Gender of the Respondent

	Frequency	**Percent**
Female	61	72.6
Male	23	27.4
Total	**84**	**100**

The results showed that majority of the respondents were female as shown by 72.6% while the rest were male as shown by 27.4%. This shows that the researcher considered all respondents irrespective of the gender to collect reliable information concerning the institutional factors influencing performance of Linda Mama Project in Isiolo County, Kenya.

4.4.2 Highest Level of Education

The respondents were asked to indicate their highest level of education. Their responses were illustrated in Table 4.4.

Table 4. 4: Respondents Highest Level of Education

	Frequency	**Percent**
Certificate	41	48.8
Diploma	27	32.1
Degree	10	11.9
Masters	4	4.8
PhD	2	2.4
Total	**84**	**100**

From the findings in Table 4.4, most of the respondents had a certificate as their highest level of education as shown by 48.8%. Others indicated that their highest level of education was diploma as shown by 32.1%, degree as shown by 11.9%, masters as shown by 4.8% and PhD as shown by 2.4%. This is an indication that the collection of data cut across all the levels of education of the respondents. In addition, most of respondents were learnt enough to fully participate in the study.

4.4.3 Age of the Respondents

The respondents were asked to indicate their age bracket. The findings for the age distribution of the respondents were as shown in Table 4.5.

Table 4. 5: Age of the Respondents

	Frequency	Percent
20-30 years	36	42.9
31-40 years	32	38.1
41-50 years	12	14.3
51–60 years	4	4.8
Total	**84**	**100**

From the findings in Table 4.5, majority of the respondents indicated to be aged between 20 and 30 years as illustrated by 42.9%. Other respondents indicated to be aged between 31 and 40 years as illustrated by 38.1%, between 41 and 50 years as illustrated by 14.3% and between 51 and 60 years as illustrated by 4.8%. The study covered all the relevant age groups hence the data collected could be relied upon.

4.5 Institutional Factors and Performance of Maternal Health Projects

The study sought to establish the institutional factors influencing performance of maternal health projects in Kenya focusing on a case of Linda Mama Project in Isiolo County, Kenya. This section hence presents findings for staffing, financial resources, availability of hospital infrastructure, project awareness and performance of Linda Mama Project.

4.5.1 Staffing

The respondents were requested to indicate the extent to which various aspects of staffing influence performance of Linda Mama Project in Isiolo County, Kenya. The findings are illustrated in Table 4.6.

Table 4. 6: Extent of Influence of Aspects of Staffing

	Mean	Std. Dev.
Education and Training	3.881	0.911
Patient- healthcare provider relationship	2.357	0.722
Staff remuneration	3.548	0.856

From the findings, the respondents indicated that education and Training as illustrated by a mean of 3.881 influence performance of Linda Mama Project in Isiolo County, Kenya to a great extent. Additionally, the respondents indicated that staff remuneration as illustrated by a mean of 3.548 influence performance of Linda Mama Project in Isiolo County, Kenya to a great extent. However, the respondents indicated that patient- healthcare provider relationship as illustrated by a mean of 2.357 influence performance of Linda Mama Project in Isiolo County, Kenya to a low extent.

4.5.2 Financial Resources

The respondents were requested to indicate the extent to which various aspects of financial resources influence performance of Linda Mama Project in Isiolo County, Kenya. The findings are illustrated in Table 4.7.

Table 4. 7: Extent of Influence of Aspects of Financial Resources

	Mean	Std. Dev.
Money for Medical Equipment	3.619	0.759
Money for facilities construction	2.738	0.540
Money for Salaries /Wages	4.286	0.769

From the findings, the respondents indicated that money for salaries /wages as illustrated by a mean of 4.286 influence performance of Linda Mama Project in Isiolo County, Kenya to a great extent. Additionally, the respondents indicated that money for medical equipment as illustrated by a mean of 3.619 influence performance of Linda Mama Project in Isiolo County, Kenya to a great extent. However, the respondents indicated that money for facilities construction as illustrated by a mean of 2.738 influence performance of Linda Mama Project in Isiolo County, Kenya to a moderate extent.

4.5.3 Awareness of the Project

The respondents were requested to indicate the extent to which various aspects of awareness of the project influence performance of Linda Mama Project in Isiolo County, Kenya. The findings are illustrated in Table 4.8.

Table 4. 8: Extent of Influence of Aspects of Awareness of the Project

	Mean	Std. Dev.
Awareness on risks and benefits	3.929	0.636
Information of available services	2.476	0.667
Registration process awareness	3.667	1.090

From the findings, the respondents indicated that awareness on risks and benefits as illustrated by a mean of 3.929 influence performance of Linda Mama Project in Isiolo County, Kenya to a great extent. Moreover, the respondents indicated that registration process awareness as illustrated by a mean of 3.667 influence performance of Linda Mama Project in Isiolo County, Kenya to a great extent. Nevertheless, the respondents indicated that information of available services as illustrated by a mean of 2.476 influence performance of Linda Mama Project in Isiolo County, Kenya to a low extent.

4.5.4 Availability of Hospital Infrastructure

The respondents were requested to indicate the extent to which various aspects of availability of hospital infrastructure influence performance of Linda Mama Project in Isiolo County, Kenya. The findings are illustrated in Table 4.9.

Table 4. 9: Extent of Influence of Aspects of Availability of Hospital Infrastructure

	Mean	Std. Dev.
Maternal Wards	3.667	0.717
Electricity	3.571	1.101
Water Infrastructure	4.062	0.873

From the findings, the respondents indicated that water infrastructure as illustrated by a mean of 4.062 influence performance of Linda Mama Project in Isiolo County, Kenya to a great extent. Moreover, the respondents indicated that maternal Wards as illustrated by a mean of 3.667

influence performance of Linda Mama Project in Isiolo County, Kenya to a great extent. In addition, the respondents indicated that electricity as illustrated by a mean of 3.571 influence performance of Linda Mama Project in Isiolo County, Kenya to a great extent.

4.5.5 Performance of Linda Mama Project

The respondents were asked to indicate the trend on in various aspects of performance of Linda Mama Project in Isiolo County, Kenya for the last five years. The findings are illustrated in Table 4.10.

Table 4. 10: Trend of Various Aspects of Performance of Linda Mama Project

	Mean	Std. Dev.
Number of women delivered safely.	3.810	0.591
Number of women who die from pregnancy related complications.	3.405	0.823
Uptake levels.	4.033	0.487
Time frame for service delivery.	3.667	0.923
Meeting goals and objectives	4.176	0.963

From the findings, the respondents indicated that meeting goals and objectives as shown by a mean of 4.176, uptake levels as shown by a mean of 4.033, number of women delivered safely as shown by a mean of 3.810 and time frame for service delivery as shown by a mean of 3.667 have increased over the last five years. The respondents also indicated that number of women who die from pregnancy related complications as shown by a mean of 3.405 have been constant for the last five years.

4.6 Multiple Regression Analysis

Regression analysis is applied when the study aims at establishing if a variable (independent) predicts another variable (dependent). This study sought to establish institutional factors influencing performance of maternal health projects in Kenya focusing on a case of Linda Mama Project in Isiolo County, Kenya. The findings were presented in various Tables.

Table 4. 11: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.871	0.758	0.746	1.094

From the findings, the independent variables were statistically significant predicting the dependent variable since adjusted R square was 0.746. This implied that 74.6% variations in performance of Linda Mama Project in Isiolo County, Kenya are explained by staffing, financial resources, awareness of the project and availability of hospital infrastructure. Other institutional factors influencing performance of Linda Mama Project in Isiolo County, Kenya that were not covered in this study accounted for 24.4% which form the basis for further studies.

Table 4. 12: ANOVA Table

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	307.091	4	76.773	61.842	.000
	Residual	98.073	79	1.241		
	Total	405.164	83			
	F-critical (obtained from F tables)= 2.4874					

From the ANOVA Table, p-value was 0.000 and F-calculated was 61.842. Since p-value was less than 0.05 and the F-calculated was greater than F-critical (2.4874), then the regression relationship was significant in determining how staffing, financial resources and awareness of the project and availability of hospital infrastructure influenced performance of Linda Mama Project in Isiolo County, Kenya.

Table 4. 13: Regression Coefficients

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	0.993	0.371		2.677	.009
Staffing	0.852	0.387	0.761	2.202	.030
Financial resources	0.764	0.309	0.658	2.472	.015
Awareness of the project	0.681	0.277	0.589	2.458	.016
Availability of hospital infrastructure	0.792	0.304	0.678	2.605	.011

The established model for the study was:

$$\mathbf{Y= 0.993 + 0.852X_1 + 0.764X_2 + 0.681X_3 + 0.792X_4}$$

Where: -

Y= Implementation of water projects

X_1= Staffing

X_2= Financial resources

X_3= Awareness of the project

X_4= Availability of hospital infrastructure

The regression equation above has established that taking (staffing, financial resources, awareness of the project and availability of hospital infrastructure), performance of Linda Mama Project in Isiolo County, Kenya would be 0.993. The findings presented also show that increase in the staffing leads to 0.852 increases in performance of Linda Mama Project in Isiolo County, Kenya if all other variables are held constant. The variable was significant since 0.03 was less than 0.05.

Further it was found that if financial resources increases, there is a 0.764 increase in performance of Linda Mama Project in Isiolo County, Kenya. The variable was significant since 0.015 was less than 0.05.

Further, the findings show that a unit increases in awareness of the project would leads to 0.681 increases in performance of Linda Mama Project in Isiolo County, Kenya in Kenya. The variable was significant since 0.016 was less than 0.05.

The study also found that a unit increases in availability of hospital infrastructure would lead to a 0.792 increase in performance of Linda Mama Project in Isiolo County, Kenya in Kenya. The variable was significant since 0.011 was less than 0.05.

Overall, staffing had the greatest influence on performance of Linda Mama Project in Isiolo County, Kenya followed by availability of hospital infrastructure, then financial resources while awareness of the project had the least influence on the performance of Linda Mama Project in Isiolo County, Kenya. All the variables were significant since their p-values were less than 0.05.

CHAPTER FIVE
SUMMARY OF FINDINGS, DISCUSSIONS, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

This chapter presents summary of findings, discussion of findings, conclusions and recommendations as per the objectives of the study.

5.2 Summary of Findings

The study sought to determine how staffing influence performance of Linda Mama Project in Isiolo County, Kenya. The study found that education and Training influence performance of Linda Mama Project in Isiolo County, Kenya to a great extent. Additionally, the study revealed that staff remuneration influence performance of Linda Mama Project in Isiolo County, Kenya to a great extent. The study also established that patient- healthcare provider relationship influence performance of Linda Mama Project in Isiolo County, Kenya to a low extent.

The study sought to establish how financial resources influence performance of Linda Mama Project in Isiolo County, Kenya. The study found that money for salaries /wages influence performance of Linda Mama Project in Isiolo County, Kenya to a great extent. Additionally, the study revealed that money for medical equipment influence performance of Linda Mama Project in Isiolo County, Kenya to a great extent. The study further found that money for facilities construction influence performance of Linda Mama Project in Isiolo County, Kenya to a moderate extent.

The study sought to determine the influence of availability of hospital infrastructure on performance of Linda Mama Project in Isiolo County, Kenya. The study established that awareness on risks and benefits influence performance of Linda Mama Project in Isiolo County, Kenya to a great extent. Moreover, the study found that registration process awareness influence performance of Linda Mama Project in Isiolo County, Kenya to a great extent. The study further found that information of available services influence performance of Linda Mama Project in Isiolo County, Kenya to a low extent.

The study sought to access how project awareness influences performance of Linda Mama Project in Isiolo County, Kenya. The study established that water infrastructure influence performance of

Linda Mama Project in Isiolo County, Kenya to a great extent. Moreover, the study found that maternal Wards influence performance of Linda Mama Project in Isiolo County, Kenya to a great extent. In addition, the study found that electricity influence performance of Linda Mama Project in Isiolo County, Kenya to a great extent.

5.3 Discussion of Findings

5.3.1 Staffing and Performance of Linda Mama Project

The study found that education and Training influence performance of Linda Mama Project in Isiolo County, Kenya to a great extent. Additionally, the study revealed that staff remuneration influence performance of Linda Mama Project in Isiolo County, Kenya to a great extent. The study also established that patient- healthcare provider relationship influence performance of Linda Mama Project in Isiolo County, Kenya to a low extent. These findings concur with Prytherch, Kakoko, Leshabari, Sauerbornv and Marx (2012) who argues that highly skilled physicians, nurses, administrators and in general the healthcare staff are critical to producing high-quality outcomes in delivery of maternal healthcare services and quality improvement hence hospital growth. To improve efficiency and delivery of maternal healthcare services, public health facilities need to build the capacity of their staff through attracting and employing an adequate number of high-quality nurses to be able to achieve delivery of maternal healthcare services.

5.3.2 Financial Resources and Performance of Linda Mama Project

The study found that money for salaries /wages influence performance of Linda Mama Project in Isiolo County, Kenya to a great extent. Additionally, the study revealed that money for medical equipment influence performance of Linda Mama Project in Isiolo County, Kenya to a great extent. The study further found that money for facilities construction influence performance of Linda Mama Project in Isiolo County, Kenya to a moderate extent. Rudasingwa, Soeters and Basenya, (2017) who argues that healthcare financing has been critical even in the efforts to make UHC a reality. Every project requires financial resources if the project goals and set performance improvement is to be achieved. Research has produced a great deal of information about how dollars are distributed to projects. However, there is insufficient data in the research on how to put dollars to productive use.

5.3.3 Availability of Hospital Infrastructure on performance of Linda Mama Project

The study established that awareness on risks and benefits influence performance of Linda Mama Project in Isiolo County, Kenya to a great extent. Moreover, the study found that registration process awareness influence performance of Linda Mama Project in Isiolo County, Kenya to a great extent. The study further found that information of available services influence performance of Linda Mama Project in Isiolo County, Kenya to a low extent. These findings are in line with Ghose, Feng and Feng (2017) who noted that infrastructural facilities like maternal wards, delivery wards/theater rooms, electricity, clean piped water and many more makes the health process aimed at sustaining the lives of the unborn and their mothers in Kenya. However, despite the fact that there is variety of literature, our research will limit itself to three infrastructural facilities that determine the implementation of MCH projects in the county and these are: The structures that are the maternal wards, the power that operated the machines, and, the clean sanitized water

5.3.4 Project Awareness and Performance of Linda Mama Project

The study established that water infrastructure influence performance of Linda Mama Project in Isiolo County, Kenya to a great extent. Moreover, the study found that maternal Wards influence performance of Linda Mama Project in Isiolo County, Kenya to a great extent. In addition, the study found that electricity influence performance of Linda Mama Project in Isiolo County, Kenya to a great extent. The findings correlate with Cook, Andrade and Paul (2014) who noted that most women from informal settlements who attend the clinics or other services offered through the project are casual laborers or are in other informal employment arrangements. Their lack of understanding of opportunity cost may be a hindrance to uptake of the maternal health care delivery project. Some employers can allow the women to take time off needed to enroll for the clinic and attend the required clinics, provided they can demonstrate attendance, but this is mentioned as rare in many cases.

5.4 Conclusions

The study concluded that staffing significantly influenced performance of Linda Mama Project in Isiolo County, Kenya. The study found that education and training and staff remuneration greatly influenced performance of Linda Mama Project in Isiolo County, Kenya. The study also established that patient- healthcare provider relationship lowly influenced performance of Linda Mama Project in Isiolo County, Kenya.

The study concluded that financial resources significantly influenced performance of Linda Mama Project in Isiolo County, Kenya. The study found that money for salaries /wages and money for medical equipment greatly influenced performance of Linda Mama Project in Isiolo County, Kenya to a great extent. The study further found that money for facilities construction moderately influenced performance of Linda Mama Project in Isiolo County, Kenya.

The study concluded that availability of hospital infrastructure significantly influenced performance of Linda Mama Project in Isiolo County, Kenya. The study established that awareness on risks and benefits and registration process awareness influenced performance of Linda Mama Project in Isiolo County, Kenya. The study found that information of available services significantly lowly influenced performance of Linda Mama Project in Isiolo County, Kenya.

The study concluded that project awareness significantly influenced performance of Linda Mama Project in Isiolo County, Kenya. The study established that water infrastructure and maternal Wards greatly influenced performance of Linda Mama Project in Isiolo County, Kenya. The study further found that electricity greatly influenced performance of Linda Mama Project in Isiolo County, Kenya.

5.5 Recommendations

The study recommends that county government should ensure that adequate staff for all hospitals to ensure there is success in Maternal projects. Additionally, it is recommended that the management of the hospitals should be flexible and create a free working environment where staff would freely air their views on services being offered. It is also recommended that there should be more delegation of power and authority to the mid-level management staff who are in close contact with patients.

The study recommended that the use and acceptance of ICT services should be scaled up and an awareness of its benefits should be communicated to the staff so that they can adopt the technology. It is recommended that there is a need to decentralize the procurement process of drugs in order to reduce delay of services and ensure fast supply of drugs for adequate service delivery.

The study also recommends the need to improve financial and social support for women and families facing maternal health crises. NGOs, government and private individuals should invest highly towards this program. These factors are therefore important intervention points for the

government as well as the Non-Governmental Organizations in the effort to minimize maternal mortality and morbidity among women.

The study also recommends that for proper success of the MCH projects in the country and more specifically in Isiolo County, infrastructure like hospital buildings, beds, equipment, water, electricity and other sanitation infrastructure have to be considered as priority needs. The management of the hospitals and other bodies handling the MCH need to come up with ways of adopting appropriate technology so as to improve the rate of major projects success and reduction in costs of operation.

The study recommends that the community through their leaders need to educate the women and men on the importance of seeking MCH services in health facilities. This can be coupled with campaigns from the ministry of health at national and county levels. This will finally enrich the people with sufficient knowledge to support the MCH programmes.

The study recommends that Ministry of Health need to encourage continuous dissemination of information regarding free maternal healthcare services in public hospitals. The government put more emphasis on Patient satisfaction as a way of attracting more patients to deliver in public hospitals. Ministry of health need to address soft inputs such as patient care and health workers' attitude towards patients.

5.6 Recommendations for Further Research

The study confined itself to the Linda mama project in Isiolo county. This study therefore should be replicated in all counties and establish the institutional factors influencing performance of maternal health projects in Kenya focusing on a case of Linda Mama Project. Future studies should look at other maternal health projects in Kenya and establish institutional factors influencing their performance

The study recommends that future studies should consider other institutional factors like management support influencing the performance of maternal health projects in Kenya. This study further recommends that future studies should look at influence of institutional factors on implementation of maternal health projects in Kenya.

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APPENDICES

Appendix I: Letter of Transmittal

Dear Respondent,

Re: Request Questionnaire Responses

I am a Master student at University of Nairobi, I am carrying out a research study on **FACTORS INFLUENCING PERFORMANCE OF MATERNAL HEALTH PROJECTS IN KENYA: A CASE OF LINDA MAMA PROJECT IN ISIOLO COUNTY, KENYA.**

You have been identified as one of the people that could be of assistance with the research and I thus request your participation in the research. Essentially, you would be required to complete a questionnaire. You will be treated anonymously and your responses will be treated with utmost confidentiality. The information you provide will be used only for academic purposes.

The questionnaire is strictly for academic purposes and any information given shall be treated with strict confidentiality; please give the information as accurately as possible. Thank you very much.

Yours faithfully,

Appendix II: Research Questionnaire

This questionnaire is to collect data for purely academic purposes. All information will be treated with strict confidence. Do not put any name or identification on this questionnaire.

Answer all questions as indicated by either filling in the blank or ticking the option that applies.

PART A: Background Information (Please tick (√) appropriate answer)

1) Please indicate your gender: Female [ ] Male [ ]

2) State your highest level of education

Certificate [ ] Diploma [ ] Degree [ ] Masters [ ] PhD [ ]

Others (Specify) ----------

3) Please Indicate your age bracket 20-30 yrs [ ] 31-40 yrs [ ]

41-50 yrs [ ] 51 – 60 [ ]

PART B: FACTORS INFLUENCING PERFORMANCE OF MATERNAL HEALTH PROJECTS

Staffing

4) To what extent do the following aspects of staffing influence performance of Linda Mama Project in Isiolo County, Kenya?

Very great extent [5] Moderate extent [3] Very low extent [1]

Great extent [4] Low extent [2]

	Very great extent	Great extent	Moderate extent	Low extent	Very low extent
Education and Training					
Patient- healthcare provider relationship					
Staff remuneration					

5) In your own opinion, how do the above aspects of staffing influence Performance of Linda Mama Project in Isiolo County, Kenya?

……

……

……

Financial Resources

6) To what extent do the following aspects of financial resources influence Performance of Linda Mama Project in Isiolo County, Kenya?

Very great extent [5] Moderate extent [3] Very low extent [1]

Great extent [4] Low extent [2]

	Very great extent	Great extent	Moderate extent	Low extent	Very low extent
Money for Medical Equipment					
Money for facilities construction					
Money for Salaries /Wages					

7) In your own opinion, how do the above aspects of training influence Performance of Linda Mama Project in Isiolo County, Kenya.?

……

……

……

Awareness of the project

8) To what extent do the following aspects of awareness of the project influence Performance of Linda Mama Project in Isiolo County, Kenya?

Very great extent [5] Moderate extent [3] Very low extent [1]

Great extent [4] Low extent [2]

	Very great extent	Great extent	Moderate extent	Low extent	Very low extent
Awareness on risks and benefits					
Information of available services					
Registration process awareness					

9) In your own opinion, how do the above aspects of awareness of the project influence Performance of Linda Mama Project in Isiolo County, Kenya?

……

……

……

Availability of Hospital Infrastructure

10) To what extent do the following aspects of availability of hospital influence Performance of Linda Mama Project in Isiolo County, Kenya?

Very great extent [5] Moderate extent [3] Very low extent [1]

Great extent [4] Low extent [2]

	Very great extent	Great extent	Moderate extent	Low extent	Very low extent
Maternal Wards					
Electricity					
Water Infrastructure					

11) In your own opinion, how do the above aspects of availability of hospital infrastructure influence Performance of Linda Mama Project in Isiolo County, Kenya?

……

……

……

Performance of Linda Mama Project in Isiolo County, Kenya

What is the trend on in the following aspects of Performance of Linda Mama Project in Isiolo County, Kenya for the last five years?

1= Greatly decreased 2= Decreased 3= Constant 4= Improved 5= Greatly Improved

	Greatly decreased	Decreased	Constant	Improved	Greatly Improved
Number of women delivered safely.					
Number of women who die from pregnancy related complications.					
Uptake levels.					
Time Frame for Service Delivery.					
Meeting Goals and Objectives					

12) In your own opinion, what is your recommendation on what should be done to improve performance of Linda Mama Project in Isiolo County, Kenya?

……

……

……

Thank You for Your Participation

Appendix III: Research Work Plan for 2019/2020

MONTHS	**Nov**	**Dec**	**Jan**	**Feb**	**Mar**	**Apr**	**May**
Activity	2019		2020				
Topic conceptualisation and literature review							
Research proposal development and writing							
Proposal presentation and defence							
Proposal Corrections							
Data collection							
Data analysis							
Report writing							
Presentation of Report							
Corrections							
Compilation and submission of final Report							

Appendix IV: Research Budget

	Units	**Cost (Ksh)**	**Total Cost (Ksh.)**
Proposal Writing			
Stationery			
i. Foolscaps	2 Reams	300.00	600.00
ii. Biro Pens	1 Doz	240.00	240.00
iii. Staple Pins	1 Pkt	100.00	100.00
iv. Photocopy Papers	2 Reams	400.00	800.00
v. Spring Files	2 Pcs	100.00	200.00
vi. Typesetting	50 Pages	30.00	1,500.00
vii. Binding	3	50.00	150.00
viii. Transport	10 Days	500.00	5,000.00
ix. Subsistence	10 Days	500.00	5,000.00
Sub-Total			13,490.00
Pilot Testing			
i. Questionnaire			
ii. Typesetting	3 Pages	100.00	300.00
iii. Photocopying	48 Pages	15.00	720.00
iv. Transport	2 Days	600.00	1,200.00
v. Subsistence	2 Days	600.00	1,200.00
Sub-Total			3,420.00
Data Collection			
i. Questionnaires	2	5,000.00	10,000.00
• Typesetting	3 Pages	100.00	300.00
• Photocopying	263copies x 3pages	10.00	2,630.00
ii. Transport	6 Days	600.00	3,600.00
iii. Subsistence	6 Days	600.00	3,600.00
iv. Data Analysis			10,000.00
Sub-Total			30,130.00
Report Writing			
i. Typesetting	70	30.00	2,100.00
ii. Photocopying	490	3.00	1,470.00
iii. Binding	7	300.00	2,100.00
iv. Transport	3 Days	500.00	1,500.00
v. Subsistence	3 Days	500.00	1,500.00
Sub-Total			8,670.00
Contingency (10%)			5,571.00
Grand Total			**61,281.00**