FACTORS INFLUENCING ACCESS TO CONTRACEPTIVES AMONG WOMEN OF REPRODUCTIVE AGE IN PUBLIC PRIMARY CARE FACILITIES IN KAJIADO CENTRAL SUB-COUNTY KAJIADO COUNTY

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DECLARATION

STUDENT

"I declare that this research thesis is my original work and has not been presented for a degree or any other award in any other university."

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APPROVAL BY SUPERVISORS

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DEDICATION

This thesis is dedicated to my family for their untiring support, my supervisors for their relentless guidance and support. To all who supported me during the study period, thank you very much and may our almighty God bless and protect you always.

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ABSTRACT

Strengthening health systems calls for attention on focus on the six health systems building blocks. The focus of this study was on medicines, vaccines and technologies, with an emphasis on access to contraceptives. In July 2013, the Kenyan government introduced the Free Maternal Service (FMS) policy. Implementing the FMS policy resulted in more usage of maternity services in Kenya however, personnel and physical resources were not enhanced to match the increasing demand. The challenges pointing to implementation of the FMS policy may be implied to lead to low access of maternal health services, including family planning services hence resulting in multiple health problems including unsafe abortions, unwanted births and unplanned pregnancies. Identifying the enabling and inhibiting elements before the execution of the interventions is likely to overcome these unmet needs. This study thus will seek to establish the factors influencing access to contraceptives by women of reproductive age within public health facilities in Kajiado County. The aim of the study was to determine how client factors, human resource factors, organizational factors and health communication influence access to contraceptives by women of reproductive age within Kajiado Central Sub-County, which has the highest average household size of 4.3 in Kajiado County. A cross-sectional descriptive research design was used in this study. The study targeted about 500 family planning clients visiting five public primary care health facilities in the sub-County. A sample of 217 drawn using systematic sampling. A structured questionnaire was used to collect data from 197 respondents. The majority of the respondents were between 25-35 years 112 (57%), were married 169 (86%), and majority 88 (45%) were on an injectable contraceptive method referred to as Depo Provera. The majority had one to four children 158 (80%), 93 (47%) had a college education, they were self-employed 81 (41%), and 61 (31%) were earning between KShs11,000-20,000. Results obtained from logistics regression analysis indicated that clients' factors ($p < 0.001$, OR=12.655, 95% CI [4.701-34.067]), and organizational factors ($p < 0.05$, OR=2.541, 95% CI [1.079-5.985]), had a significant association with access to contraceptives. This study recommends that clients should be educated to demystify the cultural beliefs, myths and misconceptions surrounding contraceptive access. The county government should ensure the supply chain is well managed to ensure a constant supply of contraceptives, adopt automated systems and reduce human interventions. The county government should also improve the health provider infrastructure, as this is likely to lead to the delivery of quality services, client satisfaction and reduced maternal mortality. The health workers counsel clients before giving contraceptives, they also are friendly and listen to clients. This practice should continue being encouraged and natured, through in-service training.

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LIST OF ABBREVIATIONS AND ACRONYMS

IUDs	Intra Uterine Devices
FP	Family Planning
FMS	Free Maternal Service
HIV/AIDS	Human Immuno Deficiency syndrome
HPV	Human Papiloma Virus
KDHS	Kenya Demographic Health Survey
KeMU	Kenya Methodist University
LARC	Long Acting Reversible Contraceptive
LMIS	Logistics Management Information Systems
NACOSTI	National Council of Science and Technology
NHIF	National Hospital Insurance Fund
NHIS	National Health Insurance Scheme
PHC	Primary health care
RMNCAH	Reproductive, Maternal, Neonatal, Child and Adolescent Health
SARC	Short-Acting Reversible Contraceptive
SDG	Sustainable Development Goals
SRH	Sexual and Reproductive Health
SRHC	Sexual and Reproductive Health Commodities
SERC	Scientific Ethics and Review Committee
UHC	Universal Health Coverage
WRA	Women of Reproductive Age
WHO	World Health Organization

CHAPTER ONE

INTRODUCTION

1.1 Background of the Study

Health systems consist of all persons and activities with a key intention of maintaining, restoring and promoting health, (World Health Organization [WHO], 2000). The World Health Organization (WHO) 2000 report outlines the goals of health system as improving health and health equities, in responsive ways while ensuring financial protection and improving efficiency. In order to achieve these goals, every system of health must be able to conduct some key functions. These functions are redefined as six essential building blocks of a health system. They include: stewardship, funding, technologies and vaccines, medical products, information, health personnel and delivery of service (WHO, 2007).

The focus of this study was medical products vaccines and technology building blocks of the health system. According to WHO (2007), a functional system of health makes sure that it provides equitable access to technologies, vaccines and medical goods whose quality is guaranteed, that are safe, are useful, cost-effective, and scientifically sound. The essential medicines that were of focus in this study were contraceptives, with a focus on factors influencing equitable access to these commodities. Ensuring access of women to contraceptive methods promotes human rights to life and freedom, freedom of self-expression and opinion and right to education and productive work, coupled with health and other benefits, (WHO,2020a).

Throughout the world, there are 1.9 billion Women of Reproductive Age (WRA) group of 15-49 years in 2019. Of these 1.9 billion WRA, those who need family planning (FP) are 1.1 billion; out of which those utilizing different methods of contraceptives are 842 million while those whose contraceptive needs remain unmet are 270 million (WHO , 2020). Usage

of contraceptives averts health risks related to pregnancy, particularly in adolescent females. Indicator 3.7.1 of the sustainable development goal highlights on the proportion of the need for FP met by modern contraceptive methods. Globally this need was met at 75.7% in 2019, with the need going down by half for modern contraceptives being met in Western and middle Africa, (Kantorová et al., 2020). Some of the reasons for low access of contraceptives include: narrow choices of methods; inaccessibility to services, mostly among young, poor and unmarried women; worry for aftereffects; disapproval by culture or religion; low quality of services in the health institutions; biased by providers and users on certain methods; and barriers caused by gender in accessing the services (WHO, 2020b).

Regionally similar trends on factors inhibiting access to contraceptive methods of choice has been observed in various African countries. In Zambia, the health systems' barriers to access of contraceptives include patients having to travel for long distances to seek these services, stock outs, inadequate policies for facilitation of contraceptives, and negative healthcare provider attitudes. At the community level, barriers include rumors, after-effects of contraceptives, beliefs of religions and culture, stigma, misconceptions and myths. Health systems mechanisms to facilitate access consist of political will to expand access to contraceptives, integrating contraceptives with other health services, counseling for partners and the existence of healthcare workers to offer contraceptive methods mix. Community-level enablers comprise of functioning structures of a community health system, the community's desire to postpone birth, and information on services related to contraceptive (Silumbwe et al., 2018). Some of the demographic factors associated with contraceptives use by women are marital status, age and family size, (Megabiaw, 2012). A survey of ten African countries on FP availability and health systems readiness indicated that stock-outs and problems related to the management of logistics are common problems among the surveyed countries. Gaps existing between the actual and reported existence of commodities

and services usually becomes a challenge in ensuring accessibility of end-users to FP methods of choice. To achieve universal health coverage (UHC) the disparity in readiness and availability of systems of health in offering contraceptive commodities and services should be addressed, (Ali et al., 2018). A study in Uganda on barriers to contraceptive use noted that constraints of funding encountered by either the health facility or the women significantly influenced family planning access. Social challenges including inadequate knowledge, misconception, stigma, religious and values of culture and side effects influenced women's motivation to access contraceptive methods, (Potasse & Yaya, 2021).

Kenya, in realizing SDG 3, implemented FP programs through public and private health sectors, with an aim of attaining global access services of reproductive and sexual health come 2030. According to Akoth et al. (2021), individuals 'level of education as well as where they reside in the county and their residence in the rural area was positively related to covert contraceptive use, yet parity, wealth and when they first engaged in sex negatively related with covert contraceptive use. Kenya is among the leading countries in FP in sub-Saharan-Africa, with the first official nationwide FP program and a national population development policy. Despite these efforts, Kenya remains among the nations in Africa that are highly populated with 52 million people. A study on tendencies and factors contributing to contraceptives use indicated that the utilization of contraceptive went up by 42.6% from 24% from 2012 to 2015. However, low utilization of contraceptive was observed among uneducated females, those married to uneducated husbands, those unmarried, and the rural women. Programs need to be implemented to address the three groups, (Kamuyango et al., 2020).

Kenya and Africa have similar trends on factors influencing the utilization of contraceptives. According to Choge et al. (2021) age, marital status, level of education Customs, traditions and stock outs were factors the hindered the access of contraceptive methods. Due to stock-

outs, clients often got contraceptive method that was not their choice. This study thus will seek the establishment of factors influencing access to contraceptives among women in reproductive age in public primary care facilities in Kajiado central sub-County, Kajiado County.

1.2 Statement of the Problem

Being able to ensure that everyone has access to methods of contraceptives promotes various human rights, among them the right to education and work, freedom of expression and opinion, liberty and right to life together with promoting health and other benefits (WHO, 2020). In July 2013, the Kenyan government set aside 3.8 billion shillings to finance free programs of care for maternal health together with a further 700 million shillings for improving free accessibility to dispensaries and health institutions, (Bourbonnais, 2013). Kenya, in 2013 introduced a policy on free maternity services, which was later handed to National Hospital Insurance Fund (NHIF) in April, 2017 under the flagship program Linda Mama, more general in scope because it encompassed deliveries, postnatal care and antenatal care, FP and any admissions resulting from pregnancy-associated problems for at least a year. The NHIF scheme reimburses the hospitals for any cost they have incurred from offering services of health. With the implementation of the FMS policy, it was deemed that the same ought to have increased usage of maternity services within Kenya (Masaba & MMmusi-Phetoe, 2020).

In Kajiado Central, Sub-County, reports indicated that women in their reproductive age in need of family planning methods did not get their method of contraceptives. The contraceptive needs, which were unmet, resulted in many challenges of health including risky abortions, unplanned births and unplanned pregnancies.

Kenya tops the Eastern African countries with contraceptive use with 55% of married women using a contraceptive method followed by Rwanda 49%, Tanzania (33%) and Uganda (31%). However, among the previous, Kenyan Provinces Rift valley (53%), Coast (44%) and Northeastern (3%) are the regions with the lowest contraceptive prevalence among married women, (Alushula, 2020). Kajiado County, which was the focus of this study, was in the previous Rift valley province and it has a modern contraceptive prevalence rate (mCPR) of 43% against a national rate of 61%. Kajiado is rated at the middle stage on the mCPR –curve

1.3 Purpose of the study

The purpose of this study was to inform on the factors that influence access to Contraceptives.

1.4 Study objectives

1.4.1 Broad objective

The aim of this study was to establish factors influencing access to contraceptives among women of reproductive age in public primary care health facilities in Kajiado central sub-county in Kajiado County.

1.4.2 Specific Objectives

In order to answer these research questions, the researcher designed a study with the following objectives:

i. To determine the influence of client factors on access to contraceptives by women of reproductive age, in Kajiado central Sub-county, Kajiado County.

ii. To evaluate the influence of health workers on access to contraceptives by women of reproductive age, in Kajiado central Sub-county, Kajiado County.

iii. To establish the influence of organizational factors on access to contraceptives by women of reproductive age in Kajiado central Sub-County, Kajiado County.

iv. To determine the influence of health communication on access to contraceptives by women of reproductive age, in Kajiado central Sub-County, Kajiado County.

1.5 Research questions

i. How do client factors influence access to contraceptives by women of reproductive age, in Kajiado central Sub-county, Kajiado County?

ii. How do health workers influence access to contraceptives by women of reproductive age, in Kajiado central Sub-county, Kajiado County?

iii. How do organizational factors influence access to contraceptives by women of reproductive age, in Kajiado central Sub-county, Kajiado County?

iv. How does health communication influence access to contraceptives by

Women of reproductive age, in Kajiado central Sub-county Kajiado County?

1.6 Justification of the Study

Contraceptives should be used as an indicator to measure the effectiveness of health services and to guarantee that services are reaching users of the services, (International Professional Practices Framework [IPPF], 2011). A functional health system is a determinant of the government's ability to deliver integrated quality contraceptive services. Contraceptive methods have a range of benefits besides preventing pregnancy; these include reducing pregnancy-related illnesses and deaths, reducing the risk of developing reproductive cancers, as well as treating of many symptoms and disorders. Besides contraceptives, FP clients also receive services such as preventing, screening and treating diseases such as chlamydia, gonorrhea, Human Immune Deficiency Syndrome (HIV/AIDS), Human

Papilloma Virus (HPV) and cervical cancer, as well as address intimate partner violence,(Kavanaugh & Anderson, 2013).

Public health facilities are the major providers of contraceptives with 60% of users of modern contraceptives obtaining them from government sources. Within public health facilities, 24% of users obtained contraceptives from government dispensaries, 20% from hospitals, and 16 % from health centers. Thirty-one percent of FP users discontinue the use of modern contraceptives within 12 months of starting use, with 11% citing side effects as the main reason for discontinuation. The public sector is the primary provider of most FP methods used in Kenya, except for the pill and male condom which are obtained from private providers and shops respectively, (Kenya National Bureau of Statistics [KNBS], 2015). With devolution and policy implementation of the FMS policy, there exist health systems gaps that hinder access of contraceptives in Kenya, necessitating the need to undertake research on factors influencing access of contraceptives by women in Primary Care facilities in Kajiado County.

1.7 Limitations of the Study

One of the limitations anticipated in this study was non-response among women taking up contraceptives due to fear of their privacy being breeched. This was overcome by explaining to the women the study's purpose and the significance that the study was intended for as well as reassuring them of utmost confidentiality and anonymity.

1.8 Delimitation of the Study

The study was conducted in Kajiado County, Kajiado Central Sub County. The target population were women of reproductive age visiting the public primary care health facilities to seek health services, who had previously accessed family planning services from the targeted facilities, or who sought FP services. The study also focused on various factors

being the client factors, human resource, organisational, and health communication, and how they influenced access to contraceptives of choice. Access was measured using two principles that is availability and acceptability.

1.9 Significance of the Study

The study results will be used by several stakeholders including; the Kajiado County government, the health facilities management, researchers and academicians.

For the County Government, these result indicate that the contraceptive commodities are sometimes out of stock and therefore measures should be taken to ensure the health systems has these commodities at all times, also the observation rooms and waiting bays should be improved to make them more comfortable, this is likely to improve clients' access to their contraceptive method. For the health facilities managers, results indicate that measures should be taken to ensure that the facility is clean there was an indication that despite there being adequate water, the facility cleanliness did not meet the expectations of the clients. In addition, more health workers ought to be deployed to minimise on the waiting time. The health care managers ought to work towards demystifying myths and misconceptions surrounding clients' access of contraceptives, specifically, take into consideration clients' culture and religion. The results may be used by the health facility managers, to enlighten health workers on aspect that hinder access to contraceptive methods, to identify gaps that exist in knowledge on choice of contraceptive methods, in informing the areas of intervention for example training of women to promote access of contraceptives. The results will also contribute to the body of knowledge in managing health commodities for better health outcomes among women of reproductive age.

1.10 Assumptions of the Study

It was assumed that the respondents were honest in responding to the questionnaire, and that they had used one or more of the FP methods or intended to use any one of the FP methods.

1.11 Operational Definition of Terms

Client factors	These are the characteristics of the women of reproductive age that promote or hinder them from up taking contraceptives. These include age, marital status, culture and religion, myths and misconceptions.
Health Workers factors	These are provider aspects that promote or hinder access of contraceptives among women of reproductive age. These are for example health worker attitudes, numbers and knowledge.
Organizational factors	These are factors in the organization that promote or hinder access to contraceptives such as waiting time, infrastructure, operating hours, if user fee is charged.
Health Communication	These relate to the communication channels that the women of reproductive age have to gain knowledge on making informed choices.
Access to contraceptives	Access is measured using five principles, ie accessibility, acceptability, availability, affordability and adequacy. This study will focus on availability and acceptability. The contraceptives should be available at all times and acceptable to the clients.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

By 2015, it was estimated that nations that are developing had 225 million females that delay childbirth, but were not utilizing any contraceptive method. The reasons attributed to the low access contraceptives include limited choices of methods, inaccessibility to contraception, low quality services, providers and users prejudice and barriers related to gender, specifically within the marginalized populations such as adolescents and the poor, (Silumbwe et al., 2018).

Use of contraceptive can improve and is among the approaches to attaining enhanced global maternal health. In the developing countries with high maternal mortality, poor reproductive health was/is seen to cause many community and family challenges. In order to address these challenges, there is need to provide quality treatment and prevention of emergency obstetric services, services of family planning, sexual transmitted diseases, HIV/AIDS & AIDs and post-abortion care. It is of utmost importance for women of all physical, social or economic status to decide on their contraceptives. Utilization of these services depends mainly on knowledge of family planning methods, knowledge and access to options and the couple's level of education (Megabiaw, 2012).

2.2 Client Factors and Access to Contraceptives

Client factors are the personal characteristics of the women that hinders them or enable them to access family planning methods of their choice at a health facility. According to Bosibori, (2017), social and cultural factors for example education and cultural practices affect successful implementation of maternal healthcare programs in health facilities in Kajiado County.

2.2.1 Social Demographic Characteristics

Low utilization of contraceptives is common among uneducated females, those married to uneducated husbands, those unmarried and rural women. Programs need to be implemented to address the three groups, (Kamuyango et al., 2020). Utilization of contraceptives is highly linked with how many children a woman gives birth to. About 15% of currently married women with no living children use contraception with 61% using contraceptives among women with more than one child and 66% among those with more than three, with a decline to 52% among women with more than five children. Women in the urban areas use (62%) contraceptives more than rural women (56%) (KNBS, 2015). Low access of contraceptives is observed mostly among young, poor and unmarried women, (WHO, 2020).

2.2.2 Cultural Factors and Access to Contraceptives

Caldwell and Caldwell (2002) as cited in (Tsui et al., 2017) emphasized the need to overcome strong cultural resistance to Family Planning, to promote Family planning access. Some of the reasons for low access of contraceptives include: disapproval by culture or religion and gender-based barriers to accessing services, (WHO, 2020). Barriers to contraceptives access at the community level include stigma, and negative religious and cultural conviction (Silumbwe et al., 2018). A study in Uganda on barriers to contraceptives use indicated that religious and values of their culture influenced the motivation of the women in accessing methods of contraceptives (Potasse & Yaya, 2021).

2.2.3 Myths and Misconceptions and Access to Contraceptives

Barriers to contraceptives access at the community level include rumors, after effects of contraceptives, beliefs of religion and culture, stigma, misconception and myths (Silumbwe et al., 2018). Most people lack knowledge on contraceptive benefits, birth spacing and limiting; where and how to access contraception; skills on using contraceptives accordingly;

myths and misconception on side-effects and actual use of contraceptives, (IPPF, 2011). Myths and misconception surrounding access of contraceptives inhibit access of these services among young women, within a survey done (Ochako et al., 2015) one of the barriers identified to contraceptive use was that contraception is linked to immorality and going astray. Worry over the after effects and negative effects were the key barriers to access, the most usual after effect highlighted by the participants was weight gain or loss, issues related to blood pressure, headaches, losing sexual urge and bleeding. The worst fear being that a certain technique will lead to infertility. Most of these worries were founded on misconceptions and myths, which are mostly learnt from social networks. These networks often approve the kind of family planning method an individual chooses besides their own individual decision.

2.3 Health Workers Factors

The health system consists of various actions, activities and people who take part in delivering health care, these are health personnel, who delivery services and medicines vaccines and technologies and leadership, management and governance systems,WHO, 2007). Often the health workers are inadequate with skills mix imbalances, poorly distributed, with poor work environments and low level of knowledge on various issues, (WHO, 2020).

2.3.1 Knowledge and Competencies

Many nations have national policies and guidelines on the provision of family planning services, however health providers often make it difficult for people to get the needed family planning services. There is inadequate research on how health worker behaviour and attitudes affect clients' attitudes and decisions. Based on research findings available, the barriers instituted by health providers are groundless restrictions, for example, inhibiting

married providers from accessing services without spousal approval, while misinforming young and unmarried women on the age restrictions of contraceptives access. Secondly some providers falsify the minimum parity that a woman should reach before taking up injectable contraceptives. In such instances these health providers wrongly believe contraceptives affects fertility, lead to infertility, and are likely to negatively affect women living with HIV/AIDS. Thirdly, women are often required to undertake unnecessary examinations, with requirement for extensive laboratory tests and too many follow-up visits. For example, providers ask clients to come back for oral contraceptives once a month for subsequent doses instead of giving women several packs of oral contraceptives at once. Women with Intra Uterine Devices (IUDs) are often asked to come for follow-up visits every three months instead of the required one a year visit. In some instances, when family planning services are available in hospitals, too often the services and commodities often not in obstetric emergency treatment rooms in hospitals, leading to unnecessary delays, referrals and unwanted pregnancies. Some health care providers often recommend family planning methods that are much easier and faster for them to provide for example the SARC, instead of finding out clients' choice and preference or what contraceptive the client is likely to be able to continue using. Due to inaccessibility of clients to a health centre or facility these provider barriers may cause women to delay seeking care or forgoing care altogether, (Intrahealth International, 2016).

2.3.2 Health Worker Attitude

A number of providers of healthcare have an attitude that is unfavourable in offering contraceptives to adolescents who were unmarried. There is need to address this issue by training these providers. Because of the FMS policy in Kenya, in Baringo County, some women were hindered from seeking facility delivery due to lack of basic materials. This basic materials were sanitary towels and babies' clothing, this is because lack of these

materials led them to receive poor reception from healthcare providers, thus making them to shy away from FMS, (Kilonzo et al., 2017 & Ogolla, 2015 as cited in Masaba & MMmusi-Phetoe, 2020). The reported elements were mostly related to non-utilization of family planning methods by adolescents included the providers' attitude. For example, it was reported by a number of adolescents that were unwilling to seek services from public clinics due to the health providers attitude (Ahanonu, 2014).

Health care providers sometimes show unfriendly or judgmental attitudes towards young people. The providers behave in disrespectful and stigmatizing way. They provide young people with poor quality services, and sometimes restrict youth to access certain services of health to the young by demanding parents' approval or spouse permission. Often there lacks steering on the services that need to be offered to the youth, hence living the youths at the discretion, values or attitudes of the service providers, to offer these services, (Gausman et al., 2021) . Similar observations were made in Zambia where due to lack of policies guiding provision of sexual reproductive health services, those in need are lacking free access to health services within clinics because of the negative attitude of the providers (Silumbwe et al., 2018).

2.3.3 Health Worker Numbers

According to Bosibori, (2017), inadequate number of qualified health personnel in centers of health affect implementation of maternal healthcare programs in Kajiado County. In most developing countries, health worker shortage is a major challenge to effective implementation and attainment of family planning security. Usually, there are skills mix imbalances, inadequate health personnel, healthcare personnel distributed poorly, unconducive working surrounding and poor knowledge. Countries and health ministries need to undertake measures to reinforce the healthcare labour policy. Execution aimed at

increasing health workforce and better safe working environment, awarding incentives that are not financial, build the health worker capacity in product selection, quantification, procurement, and inventory management at all levels of health care. There should also be a consideration to partner with non-governmental organisations to mobilize voluntary community health workers and ensuring that counselling and supply of broad spectrum of family planning methods are included in the curricular of medical personnel, (IPPF, 2011).

2.4 Organizational Factors and Access to Contraceptives

2.4.1 Service Delivery Process

In a qualitatively survey conducted to pinpoint hindrances to contraceptives access within women engaged in commercial sex work and those providing health care, three major barriers on access of family Planning were identified. These were, unsuitable clinic infrastructure, long waiting times, payment of fees, operating hours not being convenient for the clients and compulsory tests such as HIV/AIDS/Aids testing. Providers were perceived to be discriminatory with differential treatment from female and male providers. Clients health facilities where they could drop in for services in addition to peer educators and health care being the most service delivery options, (Corneli et al., 2016).

2.4.2 Commodity Stocks Contraceptives

Most unintended pregnancies worldwide result from none use, inconsistent use, and use of ineffective contraceptive methods. Lack of finances is a key obstacle to contraceptive use. In a study among women using traditional contraceptives, 37% said cost was a hindrance to access of modern methods, while 26% said contraceptives were not available. In Armenia, abortion continues to be used as a means to control birth and fertility, as abortion is perceived to be readily accessible, safer and cheaper, with 45% of pregnancies resulting into abortion. Two out of five women in Armenia have had an abortion. Women who have had an abortion

report lack of information (60%) and high cost (15%) as hindrances to using modern methods of contraception, (Intrahealth International, 2016).

Circumstances may differ, nonetheless, in some nation states, individuals do have to pay for Family Planning services, by way of consultation fees or while receiving contraceptives to a health centre. User fee was started back in the 1980s in many of the health systems of developing countries to try fund raise extra resources, to better the standards of services in health and to safeguard their existence. Regrettably, user fees can hinder people, particularly the destitute, from accessing health services, particularly family planning services.

Unmet need for family planning among the poor continues to persist. In third world countries, more that 50% of women of reproductive age desire to postpone birth, however more than 25% are using ineffective contraceptives (Singhetal,2014). This was worsened by younger women from poor background, with low level of education and who reside in remote places. There exist obstacles to effective utilization of contraceptive methods for example women worry about the side effects of the methods, and the women's family opposition on contraceptive access, however inadequate services and supply and more of financial hindrances are reported more often (Singhetal,2014). The association linking access and fees of contraceptives is straight forward, with a negative relationship; an increase in price will lead to a decrease in access of contraceptive methods, holding other factors constant. However, research has revealed that abolishing or fee increment for service often affects the supply. Often clients often interpret user fees as an indicator of quality. Clients often do not trust services provided at no cost, by perceiving them to be of low quality by questioning the health care provider intention or motivation, and this is specifically more in regards to contraceptive. Social marketing approaches for contraceptives in Africa have suggested that the services be offered at a fee The notion of

the association between family planning access and charged fees is therefore relevant, (Korachais et al., 2016).

In Kenya, Free Maternal Health Policy (FMP) introduced in Kenya in 2013, which was later transferred to NHIF in April, 2017 under the flagship programme Linda Mama, led to increased utilisation of maternal health services, however this was met by inadequate supplies, finances and the infrastructure available was not ready to handle the large influx of patients in health facilities. This may be implied to have resulted into unavailable services, therefore clients having to pay user fees in order to access these services from private health facilities, (Masaba & MMmusi-Phetoe, 2020). Results in a study by (Bosibori, 2017), on factors influencing the execution of programs related to maternal health within the County of Kajiado in Kenya, indicate that availability of financial resources influence the application of maternity healthcare programs in Kajiado County.

The FMS policy may also have been underutilised due to hidden costs within health facilities, secondary cost of travel to facilities among many costs perceived to be associated to health care within facilities. Findings indicate that destitute females residing within rural centers for example in Turkana, Baringo, Kisumu, Kilifi and Kibera slums who were more than 10 kilometres away from a health facility were likely to deliver from home due to the associated cost of travel. In as much as the maternal service cost was believed to be free women had to still meet the cost of travel, medicine and cotton wool within the Counties of Uasin Gishu and Kisumu, (Masaba & MMmusi-Phetoe, 2020). In a study by Matiang's (2018) the researcher mentioned that it was uncommon to encounter women being requested to pay user fee to carter for diagnosis for example radiology and ultrasound (Matiang, 2018 as cited in Masaba & MMmusi-Phetoe, 2020). Hidden costs were noted in similar plans in Tanzania (Kruk et al., 2008 as cited in Masaba & MMmusi-Phetoe, 2020) and within Nigeria (Edu et al., 2017 as cited in Masaba & MMmusi-Phetoe, 2020). Payment made from their

pockets as a form of payment policy within maternity care was existing in Bukina Faso (Meda et al., 2019 as cited in Masaba & MMmusi-Phetoe, 2020).

Similar finding on implementation of FMS were found in 2008 within Ghana, whereby the insurance scheme providing health for the entire nation never covered the entire cost for services related to maternity health. Women paid for drugs and diagnostic services such as ultrasound scan services. Women used up their savings, while others put on sale their assets to afford the user fees. Other women had to forego treatment due to poverty despite the FMS in Ghana, however all participants recognised the advantages of FMS policy, (Dalinjong et al., 2018 as cited in, Masaba & MMmusi-Phetoe, 2020).

A survey conducted by a project known as DELIVER targeting 64 nations, on key elements for securing contraceptives revealed that financing was the mostly inadequate element for contraceptives. Nations with a middle or low income needed to work to increase internally-generated funds public sector funds for contraceptives, secondly financing mechanisms, such as risk pooling and pre-payment could be promoted as a consideration for contraceptive services to increase global health coverage, to benefit the destitute and exposed. Governments should also dedicate line item budget line for contraceptive, being disbursed appropriately and efficiently. Consideration should be done in developing countries in the form of grants and loans from financial institutions and development institutions to fund contraceptive, (IPPF, 2011).

2.5 Health Communication and Access to Contraceptives

Most unintended pregnancies worldwide result from none use, inconsistent use, and use on ineffective contraceptive methods. Lack of knowledge on safety are the key obstacles to contraceptive use. Knowledge about contraceptive commodities and their availability, determine their safe use. A study among women using traditional contraceptives, 37% said

cost was a hindrance to access of modern methods, while 26% said unavailability of modern contraceptives were the main reasons for none use of modern contraceptives. In Armenia, women who have had an abortion report lack of information (60%) and high cost (15%) as hindrances to using modern methods of contraception, (WHO, 2021). Health care providers and educational resources are often not acknowledged as a place for acquiring contraceptive information. Instead, social networks act as the main source, while their impression is mostly affecting the decision for utilization or not, (Ochako et al., 2015). Providing contraceptive information, education and counselling services is as good as providing long-acting contraception, if looked at from effective use, (Tsui et al., 2017).

2.5.1 Knowledge of Contraceptive Methods

Sub-Saharan Africa, suffers a major shortage of services related to family planning. Low care standards, absence of knowledge and awareness and education are key barriers to access and continuation of contraceptives, (WHO, 2020).Men, women and the youth often do not have information on contraceptive benefits, spacing in giving birth, information regarding how and where contraceptives can be accessed and absence of skills and knowledge on how to effectively use contraceptives. Offering girls education opportunities in school is likely to lead to change in societal values and attitudes and enable girls and women to make informed decisions about contraceptive choices and childbearing, (Intrahealth International, 2016).

Knowledge of family planning methods is a prerequisite for initiating their use. The Kenya Demographic Health Survey (KDHS) of 2014 lists ten contemporary contraceptives these are: sterilization of men, sterilization of women, the pill, IUDs, injectable, emergency contraceptives, lactation amenorrhea, condoms for men, condoms for women, implants and

two conventional methods namely withdrawal and calendar or rhythm technic (KNBS, 2015).

Knowledge of at least one family planning method is global registering 99% of males and 98% of females, as being aware of at least one technique. Females are very aware of the contemporary contraceptive techniques (98%) as compared to conventional techniques (84%). In 2008-09 Kenya Demographic Health Survey (KDHS), male condoms (96%), injectable (95%), and the pill (94%) were the most widely known methods of contraception. Emergency contraceptives (59%), sterilization of men (47%) and lactation amenorrhea technique (12%), were the least known methods of contraception. More than 50% of women are aware of traditional family planning methods, with about four out of every five women having knowledge of the rhythm method and three out of every five having knowledge of the withdrawal method. Utilization of contraceptives is highly related to how many children a woman births.

2.5.2 Informed Choices of Contraceptives

Features noted to be basically related with a lack of contraceptive utilization by adolescents include embarrassment, shame and stigmatization fear; absence of sufficient contraceptive information, engaging in unplanned sexual activities, not being able to bargain with partners and providers' attitude. For example, it was reported by a number of adolescents that they do not visit public health institutions due to the providers negative attitude (Ahanonu, 2014).

Choice of contraceptive method may be made with ease if health workers are available to offer a mix of methods such as barrier methods, SARC and LARC. Research shows that the options for LARC are limited in a number of health Centres because staff lacking training on particular methods. Personnel require mentorship and training in services related to

LARC within all health Centres so as to assist in enhancing access to LARC methods, (Silumbwe et al., 2018).

Making informed choice in family Planning is an important principle in the delivery of these services. It is required that all family Planning providers inform women about the side effects of the methods and what to do when they encounter any problems. This information enables clients make informed decision on contraceptive which helps them deal with side effects. When clients make informed choices, users choose the most appropriate method hence reducing the likelihood of discontinuing use of contraceptives. Clients should be informed of all methods available to them. According to the 2008-09 KDHS, 62% of current users of modern contraceptive were enlightened about the after effects of these techniques, fifty-two percent were informed on actions to take in the event of side effects, and 79% were informed on other methods. Users visiting public health facilities were more likely to receive information on side effects or any associated problems(63%) , information on how to respond when they experience after effects and concerning alternative methods (81%) than from private health facility 55%, 45% and 75% respectively, (KNBS, 2015).

Inadequate knowledge is a major barrier to contraceptive security. Most people lack knowledge on the benefits of contraceptives, birth spacing and limiting; where and how to access contraception; skills on using contraceptives accordingly; myths and misconception on side effects and actual use of contraceptives. The community, providers of health care and the government can minimize the barriers related to knowledge by undertaking the following steps: by investing in studies concerning unmet needs in line with levels of income, area of residence rural/urban, status of HIV/AIDS, status of marriage and age. Systems of health being responsive by developing strategies to reach the most vulnerable-the poor and young girls. Developing awareness regarding advantages of FP and upholding social traditions supporting the choice of women to limit childbirth, space or delay it.

Mobilizing the community and ensuring systems of information management of the logistics can generate error free, timely and complete data which is regularly reviewed and made use of (IPPF, 2011).

2.6 Access to Contraceptives

Access to reproductive and sexual health commodities (SRHC) is still a big problem within Africa's South and East regions (Ooms et al., 2020). Family planning services need to be more widely available to encourage continuing growth in their use, (Intrahealth International, 2016). Delivering contraceptive services include ensuring the quality services are available, affordable and accessible with strategies tailored to reach marginalized people. Sub-Saharan Africa falls short of quality of care, with inadequate awareness and education being barriers in the continuation and access with contraceptives. The health ministry need to enhance the quality of the delivered service by raising the quality of contraceptives, by investing in awareness creation campaigns, tailor make pre-secondary school learning and programmes that target women within the community (IPPF, 2011).

2.6.1 Availability of Contraceptives

Access to contraceptives remains a big challenge in Kenya, Uganda, Tanzania and Zambia despite a clear need for the commodities. These commodities continue to be unavailable, unaffordable with regulations and supply chain challenges continuing to persist. Research in Uganda show that availability of SRH commodities remains suboptimal, (Ooms et al., 2020). A research in rural Uganda revealed that contraceptive need was unmet by childbearing age females, with about 41% of these women facing barriers resulting from shortages of commodities and, this is further worsened by shortage of resources within Uganda's healthcare system, (Megabiaw, 2012).

The policy on maternity health services that were free was introduced in Kenya in 2013, led to increased access of services, however findings demonstrate that material and personnel resources were not enhanced to deliver the increase in demand of services. This was evidenced by shortage of commodities, inadequate staff and inability of existing infrastructure to handle the increase in capacity (Masaba & MMmusi-Phetoe, 2020). Continuous stock outs within health institutions were also recorded within Burkina Faso.

There is often minimal SRHC availability within public health facilities coupled with continuous stock outs, forcing patients to be seeking services within private health centers, and when available, the SRHC are often unaffordable for majority of poor women, (Ooms et al., 2020). Shortage of favoured contraceptive techniques impacts demand and consistent contraceptive utilization. Gaps SRHC, are said to result from a gap between supply and demand forecasting. To reduce occurrences of contraceptive stock-outs requires a well-managed supply chain, (Silumbwe et al., 2018). According to Ali et al. (2018) stock outs are indicative of supply chain problems, for example poor logistics management information systems (LMIS), incorrect product selection and quantification, poor budgeting and allocation, poor inventory management and inadequate monitoring and evaluation.

2.6.2 Acceptability of Available Contraceptives

Ensuring adequate funding of FP programme by the national and county government promotes product available making it in harmony with the expectations of culture and specifically an individual's needs. Seven out of ten women in Africa, South and East Asia revealed that the available methods of contraceptives are not acceptable or suitable hence the reason behind none utilization. By overcoming the reasons related to these methods in regards to the needs that are unmet can assist minimize unplanned pregnancies by up to fifty-nine percent within these areas (IPPF, 2011). According to Masaba and MMmusi-Phetoe,

(2020), following introduction of FMS policy in Kenya, the observed low health care quality was a key problem in making use of services related to maternity. This led to delay in seeking care the quality of care may have reduced because of challenges brought about by increased numbers seeking maternal health services against understaffing and inadequate resources such as commodities. Findings from the FMS policy saw increased use among women living close to health facilities and less use among those from rural areas. Most facilities are located close to urban areas, therefore those in rural areas often travel long distances to the nearest facilities. To improve utilization of FMS, more funding targeting MCH programs need to be raised, roads to be improved in the rural areas, while at the same time providing incentives for the rural women to seek services, in addition adequate health commodities, infrastructure and human resources, need to be put in place.

2.7 Theoretical Framework

Health Belief Model (HBM)is an extensively tried social-cognitive structure appropriate for elucidating and predicting behaviour surrounding contraception, (Hall, 2012).

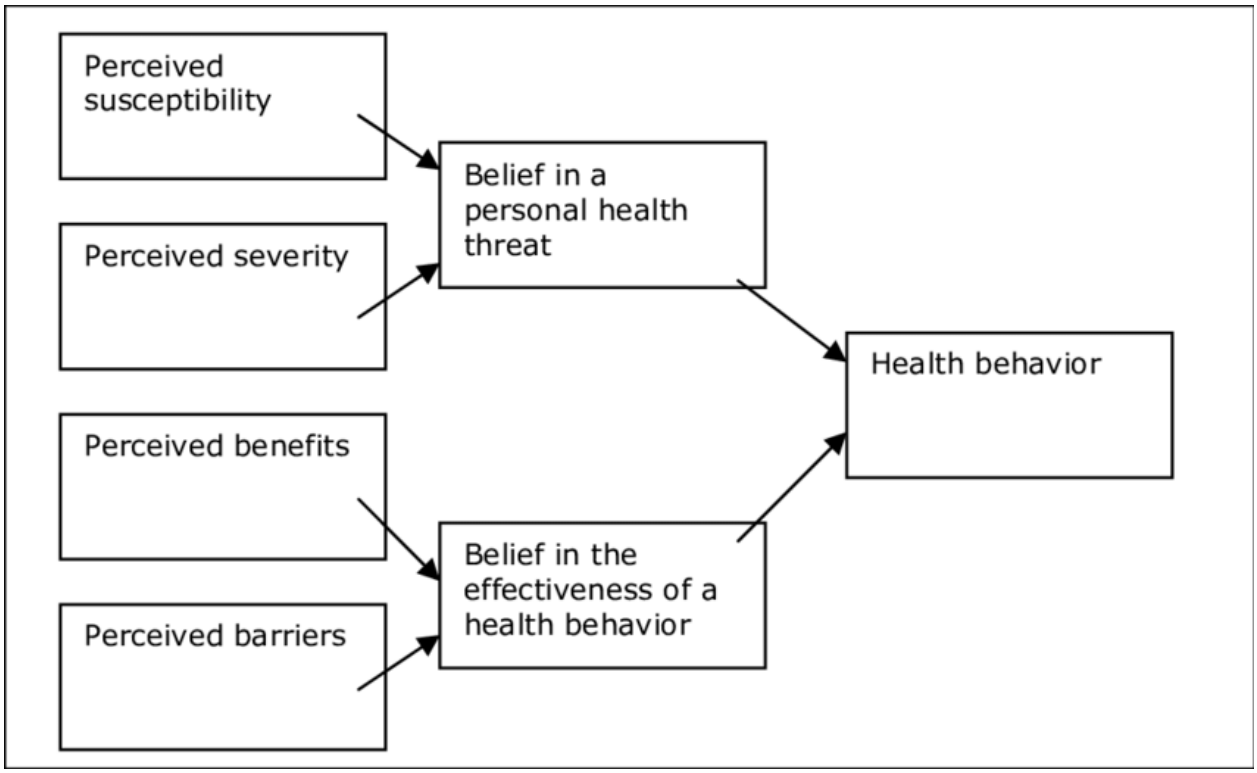
Perceived Threat—Perceived threat results from an individual's vulnerability and severity of an unplanned pregnancy and its outcome for example parenthood, abortion and birth. These threats provide an incentive to use contraception. This domain considers a personal's feeling of the risk of being expectant, such as losing a job, dropping out of school, embarrassment, parenthood responsibilities, increased stressed, among other risks of unwanted pregnancy.

Perceived Benefits: recognized gains associated with recognized effectiveness, likelihood among other benefits of utilizing methods of contraceptives to deter pregnancy in respect to the recognized challenges. By considering the benefit vis-à-vis the cost, the recognized ratio of the benefits of contraceptives in relation to its barriers assist in establishing the favored

and particular contraceptive methods and actions. For example, an Intra uterine device is associated with uneasiness, inconvenience, and costs of insertion women choose it due to low risk of hormone imbalances, high efficacy and long-term convenience.

Figure 2.1:

Theoretical Framework



Source: The-health-belief-model.png (850×519) (researchgate.net)

Perceived Barriers: These are the negative ramifications of utilizing contraceptives. This domain encompasses elements which are recognized as side effects of hormonal contraception. For example weight loss or gain and mood changes, hormonal contraceptives resulting in physiological risk for example blood clots, the inconvenience of remembering to take a pill on a daily basis or to use a condom during every intercourse, also limitation of accessing methods for example undertaking a medical procedure for insertion of an IUDs. All these are potential disadvantages are found to limit contraceptive use. This current study

borrows the perceived barriers dimension to inform the social demographic characteristics of myths and misconceptions and culture being perceived barriers to access of contraception.

Cues to Action—these are external and internal boosts that induces the consciousness of an individual regarding the threat to a perceived pregnancy and push one to consider using contraceptives to overcome the threat. Internal stimuli are for example missed menses after intercourse, while external stimuli is for example counselling by a healthcare provider, or communication on contraceptives from media or fear emanating from a sexual crony. A study by, Abrah (2021) on a group of destitute urban, African women who have gone through post-partum who started their menses immediately after birth were likely to make use of a method of contraceptive, averagely within a month, unlike those whose menses delayed post-partum. The cues to action informs the human resources factors and health communication in the current study, as these act as external stimuli to access of contraception, as they are sources of information.

Modifying and Enabling Factors—these are factors which engages with a person's perception on pregnancy and influence their choice in utilization of contraceptives. This domain includes a wide variety of reproductive, psychological, structural, social and demographic elements, which influence the behavior towards contraceptives. For example, women from low income earning women from rural areas, without an insurance cover are more likely to utilize a method of contraceptive with a low efficacy than their urban counterparts, from a high economic and social ranking who are insured. Knowledge of contraception, promotes contraceptive initiation and continuation. Women who experience early menarche and sexual debut, more cronies that are sexual, previous expectancies or having had an abortion are all likely to result into contraceptive misuse.

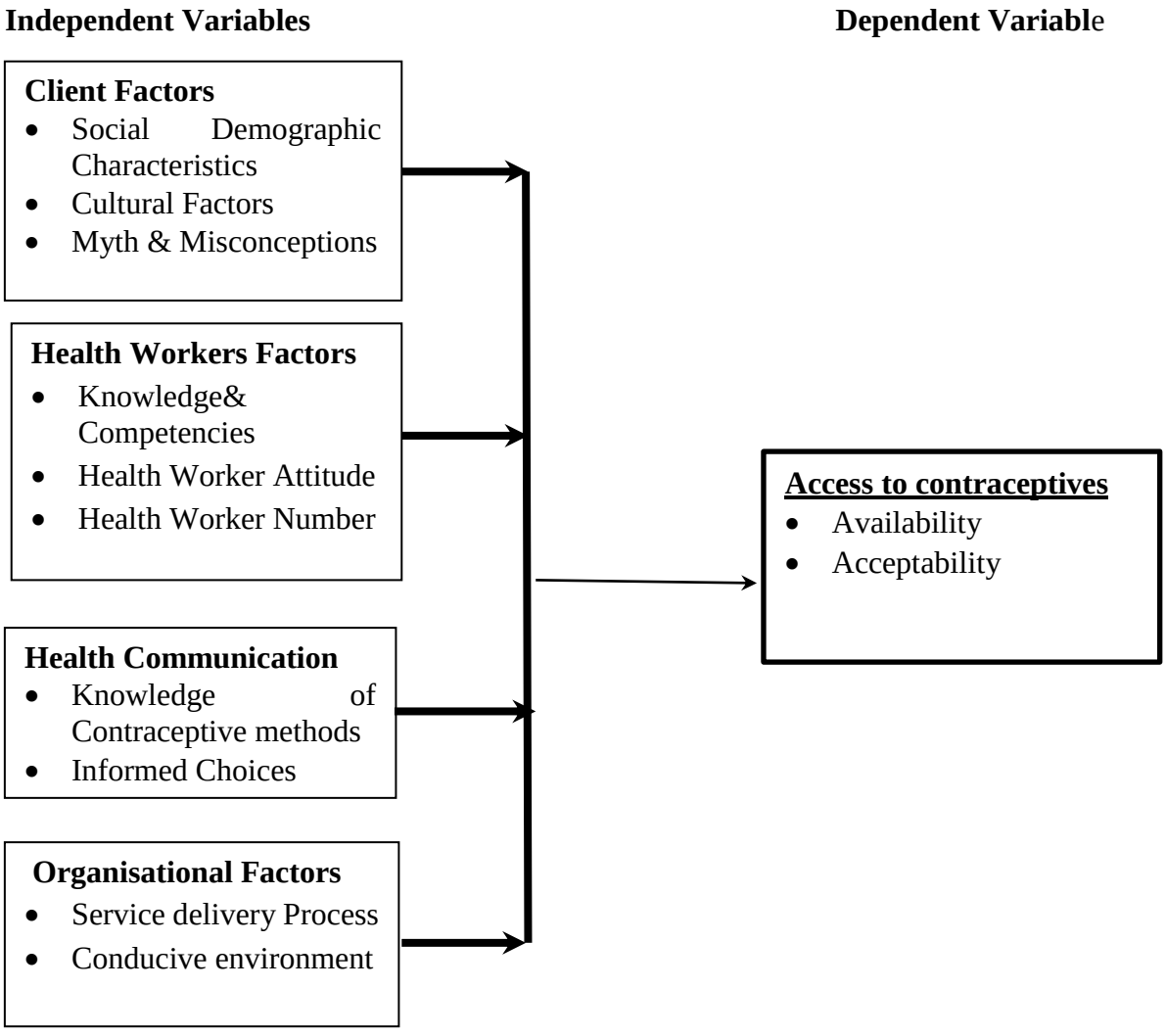
The current study borrowed concepts from the health belief model and contraceptives use. This study looked at the following factors under the conceptual framework i.e. client factors, health workers' factors, organizational factors and health communication as perceived barriers or modifying and or enabling factors to contraceptives use.

2.8 Conceptual Framework

Kombo and Tromp (2011) explains it as being an association and likely link among elements. Orodho (2009) argues that a conceptual model is an approach of associating fractures that affect a specific layout in a diagrammatic or pictorial manner.

Figure 2.2

Conceptual Framework



2.9 Literature Review Gaps

Most studies on medical products, vaccines and technology feature on the healthcare provider views, and on essential medicines without a specific line of medicine. This study considered contraceptives and focused on end user of the product. Therefore, the study focus was on factors that influence access to Contraceptive by women of reproductive age.

CHAPTER THREE

METHODOLOGY

3.1 Introduction

This chapter presents the study's design, locale, population to be targeted, sample size determination, sampling procedure, instruments of acquiring data, analysis of the data and ethical consideration undertaken in this study.

3.2 Research Design

Research design describes the structural framework and the underlying circumstances for data collection and analysis. It is a plan of action adopted by a researcher to answer the research questions. The design best described as the researcher's blueprint, is a framework, which guides how research is undertaken (Kothari, 2009). A cross sectional descriptive research design was used in this study. Descriptive research describes the characteristics of a study population at a particular point in time (Saunders et al., 2007).

3.3 Location of the Study

This study was undertaken in Kajiado County, Kajiado Central Sub County. Kajiado County is one of the 47 counties of Kenya located in the former Rift Valley province on the Kenya's South side. It borders Nairobi the capital city of Kenya. On its North Eastern side are the Counties of Makueni and Machakos, the county of Nakuru on the North Western side while Kiambu is on the North. On the western side is the County of Narok, on the Eastern side is the County of Taita Taveta while on the Southern side is the Republic of Tanzania. This county accounts for an approximate area of 212,927 square kilometers, with a population density of 51 per square kilometer. Kajiado County has a population of approximately 1,117,840, with a male population of 557,098 and female population of 560,704 and intersex being 38 based on the KNBS 2019 census. Kajiado County has five sub counties namely;

Isinya, Kajiado Central, Kajiado North, Kajiado West, Loitokitok and Mashuuru. The focus of this study was Kajiado Central. Kajiado County has an average household size of 3.5 against a national average of 3.9. Kajiado Central has the highest average household size of 4.3 followed by Kajiado west 4.2, Loitoktok and Mashuuru 4, Kajiado North 3 and Isinya 2.9, (KNBS, 2019). The average household capacity in Kajiado Central, which was the focus of this study, had a higher average compared to the national average household capacity making it important for this study.

3.4 Target Population

The initial step in coming up with a sampling design is to describe the Universe of the study. The universe under consideration can be either infinite or finite. Where the universe is finite, then the number of objects is not in doubt, while where the universe is infinite, then the number of objects is uncertain, (Kothari & Garg, 2019). To respond to the research questions, the study targeted women of reproductive age, who were accessing public primary care health facilities in Kajiado Central to seek family planning or contraceptive services. The study targeted about 500 clients who visited the five primary care facilities in three months at Kajiado Central in three months. The five facilities were AIC dispensary, Piliwa dispensary, Olenaru dispensary, Kumpa dispensary and Nkorika Health center. The three months was in relation to the duration of data collection. The five facilities are the only primary care health facilities within Kajiado Central sub county offering FP services.

3.5 Sample Size Determination and Sampling Procedure

In research, sampling is inevitable as it cuts on the researchers cost, time and access. However, in some instances the researcher can acquire and assess data from all cases in the research, i.e. as census. Although, some research objectives may restrict data collection and

analysis due to constraints of time, money and often access, this necessitates the need to use a sample (Saunders et al., 2007).

3.5.1 Sample Size Determination

The size of the sample was computed according to Mugenda and Mugenda, (2003) formula for determining sample size from a target population of less than 10,000.

$$nf = \frac{n}{1+n/N} = \frac{384}{1+384/500} = 217$$

3.5.2 Sampling Procedure

In research, a researcher may decide to use probability or non-probability sampling techniques. With probability sampling, all the study subjects have equal chances of being included into the study. With non-probability sampling, the probability of each subject being selected from the entire populace is not known (Saunders et al., 2007). This study used purposive sampling a non-probability sampling method to select Kajiado Central, which had the highest average household size in Kajiado County of 4.3**.** A census of the five public primary care health facilities was undertaken. These five are AIC dispensary, Piliwa dispensary, Olenaru dispensary, Kumpa dispensary and Nkorika Health center. The 217 respondents were proportioned to each health facility proportionately based on the target population. The clients in each facility were sampled using systematic random sampling; of every second client until the required sample size in each facility was attained to make 217 respondents from all the facilities. See Table 3.1.

Table 3. 1:

Distribution of the Study Sample

Primary Care facility	Target Population (N)	Sample Size (n)	Kth individual to be sampled=(N/n)
Olenaru dispensary	85	37	2nd
AIC dispensary	90	39	2nd
Piliwa dispensary	100	43	2nd
Kumpa dispensary	105	46	2nd
Nkorika Health center	120	52	2nd
TOTAL	**500**	**217**	

3.6 Inclusion and Exclusion Criteria

The study utilized the criteria for exclusion and inclusion to arrive at probable respondents. The criteria for exclusion and inclusion was a strategy for establishing the eligibility of the respondents.

3.6.1 Inclusion criteria

The study respondents who formed part of the sample were required to adhere to the following set standards:

i. Women in their reproductive age (15-49 years)

ii. Women seeking family planning or contraceptive services from the selected primary care facilities.

3.6.2 Exclusion criteria

The criteria of exclusion is defined as attributes that a participant can possess which can influence the outcomes accuracy. The study respondents excluded from the study were those:

i. Women who did not consent to be part of the study.

ii. Women who have not sought FP before.

3.7 Instrumentation and Data Collection Methods

Primary data was collected from the women seeking family planning services, or who had sought FP services from the selected facilities before the study. Primary data was collected from an individual source, and hence it seemed to be unique in character. Descriptive research depends on primary data acquired by interviewing individuals, communicating directly and by observation, obtained through questionnaires or interview schedules, (Kothari & Garg, 2019). The research data was collected using a structured questionnaire (See Appendix II). The structured questionnaire had a five-point psychometric scale. The views were categorized as strongly disagree, disagree, not sure, agree and strongly agree. A questionnaire was used to assemble data concerning elements such as perceptions, behaviors and other factors of a particular health service. For this study, interviewer-administered questionnaire was used.

3.8 Pre-Test

Pretesting of data collection tools is desired for purpose of improving on the reliability and validity of the tools, before using them in the study (Kothari & Garg, 2019). The data collection instrument was pretested in three primary care facility in Kajiado West Sub County, i.e. Oloishobor dispensary, Oletepesi dispensary and Mile 46 health center. The

target population per facility was 10 women at their reproductive age accessing family planning services at each facility giving us 30 respondents

3.8.1 Reliability

This is the level at which the findings are consistently produced considering the procedures of analysis and the technique used in acquiring the data (Saunders et al., 2009). The Cronbach's Alpha reliability test was done to ascertain internal consistency of the research instrument. A coefficient of between 0.7-1.0 is regarded as tolerable for consistency. The more the value of the Cronbach is closer to 1, then the more the internal reliability is considered to be consistent (Sekaran, 2002).

3.8.2 Validity

Validity is concerned with whether the study results are accurate, and measure what they are supposed to measure (Saunders et al., 2009). To ensure this, the questionnaire was checked for accuracy by the study supervisors and a data analyst, and improvement made on the final data collection tool.

3.9 Data Analysis and Presentation

Data was coded, entered into Statistical Package for Social Sciences (SPSS) version 24, an electronic backup was maintained. Data cleaning done, after which descriptive statistics were derived (totals and percentages). Bivariate analysis and binary logistic regression undertaken to explain the relationship between the dependent variable and the independent variables. The threshold for statistical significance *(p-valu*e) was set at $p< 0.05$. All copies of questionnaires are securely locked. Descriptive design was used to generate summary statistics, correlational design to generate correlation matrix, and quantitative design to generate inferential statistics. Data was presented in summary tables.

Empirical Model

Health systems factors that influence access to contraceptives of choice was expressed in the following functional relationship.

$$f(z) = 1/(1+e^{-Z})$$

Where Z is a linear combination of the covariates expressed as:

$Z = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4$

X_1, X_2, X_3, X_4, X_i= Independent Variables

X_1 = Client factors

X_2= Health workers' factors

X_3= Organisational factors

X_4= Health communication

β_0 = is the intercept

β_1, β_2, β_3, β_4, β_i=are the estimates of increase in the log odds of the dependent variable (Access to contraceptives) per unit increase in the independent variables. If the odds ratio = 1, then it is concluded that, the independent variable does not affect the dependent variable. If the odds ratios are greater than one, then the independent variable is associated with higher risk of the dependent variable and if odds ratio is less than one, then the independent variable is associated with less risk of the dependent variable or the independent variable lowers the risk of access to contraceptives.

The findings from this study were disseminated through a thesis defense to the department of Health Systems Management and Board of Post graduate studies Kenya Methodist

University. The final report was published in a peer-reviewed journal. The same shared with relevant stakeholders in Kajiado County. The results are expected to inform product selection of contraceptives to be in line with the clients' choices and preferences.

3.10 Ethical Consideration

Ethical approval was sought from a number of institutions. The Kenya Methodist University Scientific and Ethics Review committee-registration number KeMU/SERC/HSM/1/2022 (See Appendix III), The National Council of Science and Technology (NACOSTI) (See Appendix IV), and the Kajiado County Health Department (See Appendix V). Each study participant was given an opportunity to consent to participate in the study before data collection (See Appendix I). An explanation done to each of the participants before collecting data to reassure them of ethical practices during the conduct of the research. All information obtained was made anonymous and confirmation that the same was to solely be used for academic purpose and for the benefit of Kenya health policy makers in managing contraceptives to ensure that women of reproductive age had better access to contraceptive of their choice

CHAPTER FOUR

RESULTS AND DISCUSSION

4.1 Introduction

This study sought to determine the factors influencing access to Contraceptives among women of reproductive age in public primary care facilities in Kajiado Central Sub County. The specific objectives were to establish the influence of client factors, health workers', organizational factors and health communication on access to Contraceptive by women in their reproductive age, in Kajiado Central Sub County. The demographic characteristics of the respondents were presented first, followed by the descriptive statistics of the study variables, followed by response to the research questions using bivariate and multivariate analysis. The study data was collected using a structured questionnaire with a five point Likert scale (See Appendix 2). The five point Likert scale responses were simplified by recoding them into binary variables. Strongly agree and agree responses were recoded as (1) indicating agreement to clients having access to contraceptives. Not sure, disagree and strongly disagree were recoded as (0) indicating inaccessibility to contraceptives, clients who were not sure on whether there were contraceptives were likely not to access them, hence the need to classify them together with those who disagreed that contraceptives were readily available. The binary coding was guided by the dependent variable, which was access to contraceptives. Clients were deemed to have access or no access to contraceptives.

Reliability Results

The study achieved a 90.78% response rate, which was deemed good. A reliability test was undertaken to determine the internal consistency of the research tool. A coefficient of between 0.7-1.0 is deemed acceptable for consistency, see Table 4.1.

4.1: Reliability results table

	Cronbach's Alpha	No of questions
Client Factors	0.762	12
Health worker factors	0.773	11
Organizational factors	0.801	5
Health Communication	0.730	6
Access	0.864	8
Overall Reliability	0.840	42

The reliability results of the pretest indicate that a Cronbach's Alpha rate achieved was above 0.70 and therefore it was assumed that the questionnaire achieved internal consistency reliability.

4.3 Social Demographic Characteristics

The study sample comprised of women of reproductive age, who were accessing public primary care health facilities in Kajiado Central to seek family planning or contraceptive services. The respondents were drawn from five primary care facilities in in Kajiado Central. Sub-County. The five facilities were AIC dispensary, Piliwa dispensary, Olenaru dispensary, Kumpa dispensary and Nkorika Health center. Study results show that majority of the respondents were between 25-35 years 112 (57%), they were married 169 (86%), majority 88 (45%) were on injectable contraceptive method referred to as Depo Provera. Majority had one to four children 158 (80%), majority 93 (47%) had college education, they were self-employed 81 (41%), and majority 61 (31%) were earning between KShs. 11,000-20,000 See Table 4.2

Table 4. 2: ***Demographic Characteristics***

	Frequency (n)	Percentage (%)
Age		
18-24	43	22
25-35	112	57
36-45	39	20
46-50	3	2
Marital Status		
Divorced	1	1
Single	27	14
Married	169	86
Contraceptive method		
None	9	5
Pills	22	11
Coil	34	17
Implant	44	22
Depo Provera	88	45
Number of Children		
None	6	3.0
1-4	158	80
5-8	33	17
Level of Education		
Primary	39	20
Secondary	65	33
College	93	47
Employment		
Employed	66	34
Self Employed	81	41
Unemployed	50	25
Control over House hold income		
None	41	21
1,500-10,000	53	27
11,000-20,000	61	31
21,000-30,000	24	12
31,000-40,000	11	6
41,000-50,000	4	2
Above 50,000	3	2

Results indicate that majority 110(56%) of the respondents are on short acting reversible contraceptive (SARC) method. Research shows that the options for Long Acting Reversible Contraceptive (LARC) are limited in a number of health centres because staff lack training

on particular methods. Personnel require mentorship and training in services related to LARC within all health centres so as to assist in enhancing access to LARC methods, (Silumbwe et al., 2018).

Similar to findings in this study, low utilization of contraceptives is common among uneducated females, those married to uneducated husbands, those unmarried and rural women. Programs need to be implemented to address the three groups, (Kamuyango et al., 2020). Utilization of contraceptives is highly linked with the number of children the women have. About 15% of currently married women with no living children use contraception with 61% using contraceptives among women with more than one child and 66% among those with more than three, with a decline to 52% among women with more than five children, (KNBS, 2015).

4.4 Client Factors and Access to contraceptives

In order to determine the client factors that influence access to contraceptive access, respondents were asked questions to address culture, and myths and misconceptions on contraceptives access**.** The specific indicators were social demographic characteristics, religion, culture, spousal or family approval, myths, and misconception. The original questionnaire was five point Likert scale. The five point Likert scale responses was simplified by recoding them into binary variables. The recoding were guided by the dependent variable, which was access to contraceptives. Strongly agree and agree responses were recoded as (1) indicating agreement to clients having access to contraceptives. Not sure, disagree and strongly disagree were recoded as (0) indicating inaccessibility to contraceptives. The responses are presented in Table 4.3

Results indicate that most clients were not barred from using contraceptives by their denominations or religion. However, it's worth to note that 57 (29%) seems to support the

idea that religion still bars women from using contraceptive, this therefore is a barrier to women being able to access contraceptives. This statement is in agreement with the response given by majority 145(74%) who perceived religion as a barrier for women in accessing family planning.

Table 4. 3: ***Descriptive Statistics on Client factors***

Statement		**Disagree n (%)**	**Agree n** (%)
i.	My denomination does not refuse women to use family planning	57 (29)	140 (71)
ii.	I am aware of members of my denomination who use family planning	60 (31)	137 (79)
iii.	There are other denominations that refuse women to use family planning	52(26)	145(74)
iv.	Women still use family planning even when their denominations refuse them to do so	87(44)	110(56)
v.	My culture and traditions allow women to use modern contraceptives such as pills and injections	143(74)	54(26)
vi.	My culture and traditions allow women to use traditional contraceptives such a herbs and withdrawal	108(55)	89(45)
vii.	My partner is aware that I am using family planning	90(46)	107(54)
viii.	My partner allows me to use family planning method of my choice	97(49)	100(51)
ix.	Family planning has negative side effects on a woman	59(30)	138(70)
x.	Family planning may lead to infertility in women	119(60)	78(40)
xi.	Family planning makes a woman to be promiscuous and to cheat on her spouse	130(66)	67(34)
xii.	Family planning makes a woman loose desire for sex	121(61)	76(39)

Culture was seen to hinder women from accessing contraceptives as majority 143(74%) responded that their culture and traditions did not allow women to use modern contraceptives. such as pills and injections. Similar case applied to traditional family planning methods as well as use of herbs, where slightly more than half 108(55%) said that their culture did not allow them to use herbs or traditional family planning methods. Results also indicate that more than a half 107(54%) of the respondent used contraceptives with the knowledge of their spouse and only slightly more than a half 100(51%) were allowed by

their spouse to use contraceptives, this presents spouse as a hindrance to family planning access.

Majority 138(70%) mentioned that family planning has negative side effects on a woman which is a perceived barrier. However more than half 119(60%) believe that family planning does not lead to infertility in women, neither does it lead to women being promiscuous130(66%), nor does it make a woman loose desire for sex, 121(61%). This implies a perceived threat that contraceptive methods can lead to infertility, that it has side effects, that it can lead to a woman's lack of desire for sex and that it can make a woman to be promiscuous may act as hindrances to access of family planning. This evidence is from more than 30% who agreed with these statements. There was a significant association (χ^2 =12.59, *P*=0.002) between level of education and access to contraceptives with more than half 76(51%) of those who said to have access to contraceptives having attended college. A significant association was found between the number of children a woman had and up taking contraceptives (χ^2 =19.33, *P*=0.013), women who had more than six children were more likely to use contraceptives.

These findings are in agreement with , Kamuyango et al. (2020) who said that low utilization of contraceptives is common among uneducated females and utilization of contraceptives is highly linked with how many children a woman gives birth to. Some of the reasons for low access of contraceptives include: disapproval by culture or religion and gender-based barriers to accessing services, (WHO, 2020). Barriers to contraceptives access at the community level include stigma, and negative religious and cultural conviction (Silumbwe et al., 2018). A study in Uganda on barriers to contraceptives use indicated that religious and values of their culture influenced the motivation of the women in accessing methods of contraceptives (Potasse & Yaya, 2021). Similarly, (Silumbwe et al., 2018) mentioned that barriers to contraceptives access at the community level include rumors, after effects of

contraceptives, beliefs of religion and culture, stigma, misconception and myths. Similar to findings in this study Ochako et al. (2015) found that one of the barriers identified to contraceptive use was that contraception is linked to immorality and going astray, worry over the after effects and negative effects such as weight gain or loss, issues related to blood pressure, headaches, losing sexual urge and bleeding. The worst fear being that a certain technique will lead to infertility.

4.5 Health Workers Influence on Access to contraceptives

In order to determine the health worker factors that influence access to contraceptive, respondents were asked questions to address the specific indicators, which were clients' perception on health worker knowledge and competencies, health worker attitude, and health worker numbers. The original questionnaire was five point Likert scale whose responses were simplified by recoding them into binary variables. The recoding was guided by the dependent variable, which was access to contraceptives. Strongly agree and agree responses were recoded as (1) indicating agreement to clients having access to contraceptives. Not sure, disagree and strongly disagree were recoded as (0) indicating inaccessibility to contraceptives. The responses are presented in Table 4.4. Results indicate that more than 90% of the respondents believe that the health workers are highly knowledgeable on the family planning methods and that the health workers advise them on the benefits and side effects of family planning method. About 30% of the respondents mentioned that the health workers seek approval from their spouse or parents before giving them family planning services; with about the same number feeling that they were asked to take unnecessary test before given family planning, this implies that adequate information on need for tests is not given to all clients.

Table 4. 4: ***Descriptive Statistics on Health Workers Factors***

Statement		**Disagree n (%)**	**Agree n** (%)
i.	The health workers are highly knowledgeable on the family planning methods	10 (5)	187 (95)
ii.	The health workers advises me the benefits of family planning method to take	6 (3)	191(97)
iii.	The health worker counsels me before giving me family planning	10 (5)	187 (95)
iv.	The health workers require an approval from my spouse or parents before I get family planning services	140(71)	57 (29)
v.	The health worker asks me to take unnecessary test before giving me family planning services	135(69)	62 (31)
vi.	The health worker gave me the family planning method that I asked for	42 (21)	155 (79)
vii.	The health worker informed me on the side effects of family planning method before giving me the Family planning	20 (10)	177 (90)
viii.	The health workers who give family planning are very friendly	25(13)	172 (87)
ix.	The health workers who give family planning listen to us when we tell them what we need	22 (11)	175 (89)
x.	The health workers are adequate in number to handle all the clients in need of family planning	98 (50)	99 (50)
xi.	Getting family planning services at the hospital takes a short time	104 (53)	93 (47)

More than 85% said that the health workers are very friendly and often listen to the clients. However, results indicate that the number of workers is not adequate, explaining why slightly more than a half 104 (53%) disagreed to the waiting time being adequate. Only 155 (79%) respondents mentioned that they received a family planning option of their choice, indicating that there was about 20% who received contraceptives that was given to them by the health worker.

The results of this study are in agreement with (Intrahealth International, 2016). The study found that health care providers often recommend family planning methods that are much easier and faster for them to provide for example the SARC, instead of finding out clients' choice and preference or what contraceptive the client is likely to be able to continue using. Results of this study established that most of the health workers are friendly and often listen

to clients' needs. These are Kilonzo et al., (2017), Ogolla, (2015) as cited in Masaba & MMmusi-Phetoe, (2020),They mentioned that a number of providers of healthcare have an attitude that is unfavourable in offering contraceptives to adolescents who are unmarried. Probably the age difference in the current study where all the respondents were more than 18 years could explain the difference in the two studies. Similar to this study Bosibori, (2017) reported inadequate number of qualified health personnel in health centres affect implementation of maternal healthcare programs in Kajiado County. In addition, IPPF (2011) mentioned that health worker shortage is a major challenge to effective implementation and attainment of family planning security. Usually, there are skills mix imbalances, inadequate health personnel, healthcare personnel poorly distributed, unconducive work surrounding and poor knowledge. This study established that most clients were on SARC methods. Research shows that the options for LARC are limited in a number of health centres because staff lack training on particular methods. Personnel require mentorship and training in services related to LARC within all health centres so as to assist in enhancing access to LARC methods, (Silumbwe et al., 2018).

4.6 Organizational Factors and access to contraceptives

In order to determine the organizational factors that influence access to contraceptives, respondents were asked questions to address the specific indicators, which were service delivery process, conducive environment, and stock status. The original questionnaire was five point Likert scale whose responses were simplified by recoding them into binary variables. The recoding was guided by the dependent variable, which was access to contraceptives. Strongly agree and agree responses were recoded as (1) indicating agreement to clients having access to contraceptives. Not sure, disagree and strongly disagree were recoded as (0) indicating inaccessibility to contraceptives. The responses are presented in Table 4.5

Table 4. 5: ***Descriptive Statistics on Organizational Factors***

Statement		Disagree n (%)	Agree n (%)
i.	The waiting bay and observation room is comfortable	100 (51)	97 (49)
ii.	The waiting time is acceptable	95 (48)	102 (52)
iii.	The operating hours are convenient	185 (94)	12 (6)
iv.	The facility does not run out of stock for contraceptives	159 (81)	38 (19)
v.	The facility is clean	45 (23)	152 (77)
vi.	The facility has water and clean sanitary facilities	132 (67)	65 (33)

Results indicate that the service delivery process is not up to the expectations of the clients. The facility outlook is not up to the expectations of the clients with slightly more than half 100(51%) saying the waiting bay and observation room is not comfortable. The service delivery process takes more time than expected, with only half of the respondents 102(52%) saying the waiting time is acceptable. Majority said the operating hours are not convenient 185(94%) with some facilities not operating at night and over the weekends. On family planning stock, majority 159 (81%) of the respondents said the facility runs out of stock for contraceptives. Majority also said the facility cleanliness was not up to their expectations with only 152 (77%) saying the facility is clean, majority 132 (67%) said the facilities did not have water and clean sanitary facilities.

This study is in agreement with Corneli et al. (2016) who conducted a qualitative study and established that some of the major barriers to access of family planning were unsuitable clinic infrastructure, stock out of contraceptives, long waiting times, and operating hours not being convenient for the clients. According to W H O (2020) in a study among women using traditional contraceptives, 37% said cost was a hindrance to access of modern methods, while 26% said unavailability of modern contraceptives was the main reasons for none use of modern contraceptives.

4.7 Health Communication among Family Planning Clients

In order to determine whether health communication takes place among family planning clients, respondents were asked questions to address the specific indicators which were knowledge of contraceptive methods and Informed Choices. The original questionnaire was five-point Likert scale whose responses was simplified by recoding them into binary variables. The recoding was guided by the dependent variable which was access to contraceptives. Strongly agree and agree responses were recoded as (1) indicating an agreement to clients having access to contraceptives. Not sure, disagree and strongly disagree were recoded as (0) indicating inaccessibility to contraceptives. The responses are presented in Table 4.6. Results indicate that more than 80% of respondents agreed to receive relevant communication from health care providers pertaining to contraceptive methods.

Table 4. 6: ***Descriptive Statistics of Health Communication***

Statement		**Disagree**	**Agree**
		n (%)	**n** (%)
i.	I am aware of at least one family planning method that I can use	12(6)	185 (94)
ii.	Contraception helps me in spacing my children and having a child when I want	15 (8)	182 (92)
iii.	I know that I can get a contraception method from a public health facility	18 (9)	179 (91)
iv.	The health worker informs me of all family planning methods available.	31 (16)	166 (84)
v.	The health worker tells me of the side effects of each method and the method of my choice.	36 (18)	161 (82)
vi.	I received my family planning method at this facility.	44 (22)	153 (78)
vii.	I received counselling before given the family planning of choice.	20 (10)	177 (90)
viii.	The public health facility always has the choice of method I require	130 (66)	67 (34)

Majority were aware of at least one family planning method that they could use 185 (94%). The 182 (92%) were also aware that contraceptives help them in spacing children and having children when they wanted. The majority 166 (84%) also agreed that the health workers informed them of all family planning methods available, and the majority 161 (82%) were told of the side effects of each method and their method of my choice. However, their choice of contraceptives was highly limited by inadequate choices at the public health facilities, as indicated by the majority 130 (66%).

Knowledge about contraceptive commodities and their availability, determine their safe use. Providing contraceptive information, education and counselling services is as good as providing long-acting contraception, if looked at from effective use, (Tsui et al., 2017).

Unlike in other studies done in Sub-Saharan Africa where, absence of knowledge and awareness and education are key barriers to access and continuation of contraceptives, (WHO, 2020), this study found that the client were well informed of the contraceptive methods and their side effects. Knowledge of family planning methods is a prerequisite for initiating their use. Similar to results by (KNBS, 2015), where knowledge of at least one family planning method was global registering 99% of males and 98% of females, as being aware of at least one technique, majority of the respondents in this study had knowledge of at least one family planning method.

Choice of Contraceptive method is be made with ease if health workers are available to offer a mix of methods such as barrier methods, SARC and LARC. Research shows that the options for LARC are limited in a number of health center because staff lack training on particular methods. Personnel require mentorship and training in services related to LARC within all health center so as to assist in enhancing access to LARC methods, (Silumbwe et al., 2018). Making an informed choice in FP is an important principle in the delivery of these

services. It is required that all FP providers inform women about the side effects of the methods and the steps to take in the event they experience any. This information enables clients make informed decision on contraceptive and helps them deal with side effects. When clients make informed choices, users choose the most appropriate method hence reducing the likelihood of discontinuing use of contraceptives. Clients should be informed of all methods available to them, (KNBS, 2015).

4.8 Access to Contraceptives of Choice

In order to determine whether clients had access to contraceptives of their own choice, respondents were asked questions to address the specific indicators which were availability and acceptability of contraceptives. The original questionnaire was five-point Likert scale whose responses were simplified by recoding them into binary variables. The recoding was guided by the dependent variable which was access to contraceptives. Strongly agree and agree responses were recoded as (1) indicating an agreement to clients having access to contraceptives. Not sure, disagree and strongly disagree were recoded as (0) indicating inaccessibility to contraceptives. The responses are presented in Table 4.7

Table 4. 7: ***Descriptive Statistics on Access to Contraceptives***

Statement	**Disagree**	**Agree**
	n (%)	**n** (%)
i. I get contraceptive method of my choice whenever I need	111(56)	86 (44)
ii. This facility always has contraceptive commodities at all times	157 (80)	40 (20)
iii. I am counselled before I get contraceptive method	20 (10)	177 (90)
iv. I am given family planning options to choose from	46 (23)	151 (77)
v. The contraceptive method I received is acceptable to me	51 (26)	146 (74)
vi. I am satisfied with the family planning services	59(30)	138 (70)
vii. I always come back whenever I need family planning services	52 (26)	145 (74)
viii. I can refer a friend to this facility for family planning services.	14 (31)	183 (69)

Results from Table 4.7 shows that more than half of the respondents do not get the contraceptive method of their choice 111(56%), this could be explained by the fact that majority 157 (80%) cited the facilities lacked contraceptive commodities most of the time. There is still a small portion who stated that they are not given family planning options to choose from 46(23%), neither were the contraceptive method given acceptable to them51 (26%), this could imply limited access to Contraceptive of their choice. A small proportion also expressed dissatisfaction with the family planning services 59(30%), with 52 (26%) indicating they would not come back to seek family planning services neither would they 14 (31%) refer a friend to the health facility for family planning services.

Similar to this study access to contraceptives remains a big challenge in Kenya, Uganda, Tanzania and Zambia despite a clear need for the commodities. These commodities continue to be unavailable. Research in Uganda show that availability of SRH commodities remains suboptimal, (Ooms et al., 2020). The policy on maternity health services that are free was introduced in Kenya in 2013, led to increased access of services however; findings demonstrate that material and personnel resources were not enhanced to deliver the increase in demand for services. This was evidenced by shortage of commodities, inadequate staff and the inability of existing infrastructure to handle the increase in capacity (Masaba & MMmusi-Phetoe, 2020). Continuous stock outs within health institutions were also recorded within Burkina Faso. There is often minimal Sexual Reproductive Health Commodities (SRHC) availability within public health facilities coupled with continuous stock outs, (Ooms et al., 2020). Shortage of favoured contraceptive techniques affects demand and consistent contraceptive utilization. Gaps in SRHC are said to result from a gap between supply and demand forecasting. To reduce occurrences of contraceptive stock-outs requires a well-managed supply chain, (Silumbwe et al., 2018). According to Ali et al., (2018) stock outs are indicative of supply chain problems, for example poor logistics management

information systems (LMIS), incorrect product selection and quantification, poor budgeting and allocation, poor inventory management and inadequate monitoring and evaluation.

A small portion of the respondents said the contraceptive methods given to them was not acceptable to them. Similarly, seven out of ten women in Africa, South and East Asia revealed that the available methods of contraceptives are not acceptable or suitable hence the reason behind non-utilization. By overcoming the reasons related to these methods in regards to the needs that are unmet can assist minimize unplanned pregnancies by up to fifty-nine percent within these areas (IPPF, 2011).

4.9 Chi-Square Measure of Association

Cross tabulations were done to establish the relationship between each independent variable and the dependent variable. The Chi-Square statistic was used to evaluate tests of independence of the categorical variables. The data recoded from Likert scale to binary variables was used to test the independence of the variables. The results are presented in Table 4.8. The results indicate that client factors were significantly associated with clients' access to contraceptives. The results were significant at $p<0.05$. However, the association of health workers, organizational and health communication were not significant with a p-value >0.05. This implies that the final decision to take up contraceptives lies on the client and the influences surrounding them such as religion or denomination, culture, spouse and family and myths and misconceptions held. Client knowledge on the benefits of using contraceptives and available contraceptive options is the key in determining if the clients take up a family planning method.

Table 4. 8: ***Chi-Square Measure of Association***

Variable	Sample Size (n)	χ^2	Df	*p*-value
Client Factors	197	30.149	1	0.001
Health workers factors	197	2.958	1	0.085
Organizational Factors	197	0.305	1	0.581
Health Communication	197	2.207	1	0.137

4.10 Multivariate Analysis

Binary logistic regression was performed to determine the effects that client factors, health workers, organizational and health communication has on the likelihood that clients will be guaranteed access to contraceptives of their choice. Hosmer and Lemeshow Goodness-of-fit test (GOF) was used to test whether the study model was correctly specified. The results indicate that the logistic regression model was statistically significant, χ^2 (4) = 3.331, *p >0.05 where* p=0.504, see Table 4.9.

Where there is a GOF result with a p-value below 0.05, you fail to accept the study model, and vice versa, if the GOF results p-value is higher than 0.05, the model passes the test. The model, explained 23.1% (Nagelkerke R^2) of the variations of accessing Contraceptives, see Table 4.10.

Table 4. 9: ***Model Summary***

Step	-2 Log likelihood	Cox & Snell R Square	Nagelkerke R Square
1	185.671[a]	.155	.231

Table 4. 10:

Hosmer and Lemeshow Test

Step	Chi-square	Df	Sig.
1	3.331	4	.504

The study was able to correctly classify 80.7% of all the responses, see Table 4.11.

Table 4. 11:

Predicted and Observed Results on the Access to contraceptives

Observed		Predicted Access Disagree (n)	Agree (n)	% Correct
Access	Disagree (n)	22	26	45.8
	Agree (n)	12	137	91.9
Overall Percentage				80.7

The results of the research questions are presented in Table 4.12.

Results with a p-value of less than 0.05 were interpreted to be significant.

Table 4. 12: ***Determinants of Access to Contraceptive***

						95% EXP(B)	C.I.for
	B	**S.E.**	**Wald**	**df**	**Sig.**	**Exp(B)**	**Lower**	**Upper**
Client factors	2.538	.505	25.236	1	.000	12.655	4.701	34.067
Health worker factors	1.427	1.365	1.094	1	.296	4.167	.287	60.448
Organizational factors	.933	.437	4.555	1	.033	2.541	1.079	5.985
Health communication	.026	1.024	.001	1	.980	1.026	.138	7.631
Constant	-2.691	1.639	2.696	1	.101	.068		

Variables in equation: *Client factors, Health worker factors, Organizational factors, and Health communication, with n=197*

Therefore, only two variables met this standard, i.e. client factors and organizational factors. From these results client factors with a $p<0.001$ and organizational factors with a $p<0.05$,

added significantly to the access to contraceptives model. These variables in the equation table can be used to predict the probability of an event occurring based on a one-unit change in access to contraceptive when all other independent variables remain constant.

This implies that religion, culture, myths and misconceptions and spousal or family approval significantly influences clients' access to contraceptive. Where these client factors were taken into consideration while providing contraceptives to women of reproductive age, clients were 12.655 times more likely to access contraceptives, than where these factors were not taken into consideration, in addition, one-unit increase in client factors led to 2.538 increase in access to contraceptives.

Organizational factors were measured against three indicators, which were service delivery process, conducive environment, and stock status. The study shows that where the waiting time was acceptable, the operating hours were convenient, the facility was well stocked with contraceptives, and it was clean, clients were 2.541 more likely to access contraceptives of their choice, more than where these factors were not taken into consideration.

Though health worker and health communication factors did not significantly influence access to contraceptives, it is worth to note that where health workers were friendly clients were 4.167 times more likely to access contraceptives than where health workers were not friendly. On the other hand, where clients perceived to receive relevant information from the health workers, they were 1.026 times more likely to access contraceptives than where there was no communication.

These findings agree with other results from the literature reviewed, barriers to contraceptive access at the community level include stigma, and negative religious and cultural conviction (Potasse; Silumbwe et al., 2018 & Yaya, 2021). Similarly, Silumbwe et al. (2018) mentioned that barriers to contraceptives access at the community level include rumors, after

effects of contraceptives, beliefs of religion and culture, stigma, misconception and myths. Similar to findings in this study Ochako et al. (2015), found that one of the barriers identified to contraceptive use was that the same was linked to immorality and going astray, worry over the after-effects and negative effects such as weight gain or loss, issues related to blood pressure, headaches, losing sexual urge and bleeding. The worst fear is that a certain technique will lead to infertility. Ahanonu, (2014) ; Gausman et al. (2021); Kilonzo et al. (2017), Ogolla, (2015) as cited in Masaba & MMmusi-Phetoe, (2020), mentioned that a number of providers of healthcare have an attitude that is unfavourable in offering contraceptives to adolescents . This study is in agreement with Corneli et al. (2016) who conducted a qualitative study and established that some of the major barriers to access of FP were unsuitable clinic infrastructure, stock out of contraceptives, long waiting times, and operating hours not being convenient for the clients. According to WHO (2020) in a study among women using traditional contraceptives, 37% said cost was a hindrance to access of modern methods, while 26% said unavailability of modern contraceptives were the main reasons for none use of modern contraceptives. Knowledge about contraceptive commodities and their availability, determine their safe use. Providing contraceptive information, education and counselling services is as good as providing long-acting contraception, if looked at from effective use, (Tsui et al., 2017). In Sub-Saharan Africa, absence of knowledge and awareness and education are key barriers to access and continuation of contraceptives, (WHO, 2020)

CHAPTER FIVE

SUMMARY OF FINDINGS, CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

This chapter represents a summary of findings as per the specific study objectives. Conclusions and recommendations are presented to inform future decisions and research.

5.2 Summary of Findings

This study sought to determine the health system factors influencing access to Contraceptives among women of reproductive age in public primary care facilities in Kajiado Central Sub-County. The specific objectives were to establish the influence of client factors, health workers', organizational factors and health communication on access to Contraceptive by women in their reproductive age, in Kajiado central Sub County.

The study sample comprised of women of reproductive age, who were accessing public primary care health facilities in Kajiado Central to seek family planning or contraceptive services. The respondents were drawn from five primary care facilities in in Kajiado Central. Sub-County. The five facilities were the Kajiado AIC dispensary, Piliwa dispensary, Olenaru dispensary, Kumpa dispensary and Nkorika Health center.

Study results show that majority of the respondents were between 25-35 years 112 (57%), they were married 169 (86%), majority 88 (45%) were on injectable contraceptive method referred to as Depo Provera. A majority had one to four children 158 (80%), most 93 (47%) had college education, they were self-employed 81 (41%), and most 61 (31%) were earning between KShs11,000-20,000.

Results on client factors indicate that majority were not barred from using contraceptives by their denominations or religion. However, it's worth to note that 57 (29%) seems to support the idea that religion still bars women from using contraceptive, which is a barrier to women being able to access contraceptives. This statement is in agreement with the response given by majority the 145(74%) who felt that there are other denominations that refuse women to use family planning. Culture was seen to hinder women from accessing contraceptives as majority 143(74%) responded that their culture and traditions did not allow women to use modern contraceptives such as pills and injections. More than a half 107(54%) of the respondents used contraceptives with the knowledge of their spouse and only slightly more than a half 100(51%) were allowed by their spouse to use contraceptives, this presents spouse as a hindrance to family planning access. On myths and misconceptions, the majority 138(70%) mentioned that family planning has negative side effects on a woman, however more than half 119(60%) believe that family planning does not lead to infertility in women, nor does it lead to promiscuous130(66%), nor does it make a woman loose desire for sex, 121(61%). There was a significant association (χ^2 =12.59, *P*=0.002) between the level of education and access to contraceptives with more than half 76(51%) of those who said to have access to contraceptives having attended college. A significant association was found between the number of children a woman had and up taking contraceptives (χ^2 =19.33, *P*=0.013), women who had more than six children were said to have access to contraceptives.

Results on health workers' factors indicate that more than 90% of the respondents believe that the health workers are highly knowledgeable on the family planning methods and that the health workers advise them on the benefits and side effects of family planning method.

However, results indicate that the number of workers is not adequate, explaining why slightly more than half 104 (53%) disagreed to the waiting time being adequate. Only 155

(79%) respondents mentioned that they received a family planning option of their choice, indicating that there was about 20%, who received contraceptives given to them by the health worker.

Results on organizational factors indicate that the service delivery process is not up to the expectations of the clients, slightly more than half 100(51%) said the waiting bay and observation room is not comfortable. The service delivery process takes more time than expected, with only half of the respondents 102(52%) saying the waiting time is acceptable. Majority said the operating hours are not convenient 185(94%) with some facilities not operating at night and over the weekends. On family planning stock, majority 159 (81%) of the respondents said the facility runs out of stock for contraceptives. Majority also said the facility cleanliness is not up to their expectations with only 152 (77%) saying the facility is not clean, despite majority 132 (67%) saying the facilities had water and clean sanitary facilities.

Results on health communication indicate that more than 80% respondents agreed to receive relevant communication from health care providers pertaining contraceptive methods. On access results show that more than half of the respondents do not get contraceptive method of their choice 111(56%), this could be explained by the fact that majority 157 (80%) cited the facilities lacked contraceptive commodities most of the time. There is still a small portion who stated that they are not given family planning options to choose from 46 (23%), neither were the contraceptive method given acceptable to them51 (26%), this could imply limited access to contraceptive of their choice. A small proportion also expressed dissatisfaction with the family planning services 59(30%), with 52 (26%) indicating they would not come back to seek family planning services nor would they 14 (31%) refer a friend to the health facility for family planning services.

Bivariate analysis shows that there was a significant association between client factors and access to contraceptives of choice χ^2 *(1) =30.149, p<0.05*, where *p=0.000*. Hosmer and Lemeshow Goodness-of-fit test (GOF) was used to test whether the study model was correctly specified. The results indicate that the logistic regression model was statistically significant, χ^2 (4) = 3.331, *p >0.05 where* p=0.504. A GOF result with a *p-value* below 0.05, you fail to accept the study model, and vice versa, if the GOF results *p-value* is higher than 0.05, the model passes the test. The model explained 23.1% (Nagelkerke R^2) of the variations of accessing contraceptive. The study was able to correctly classify 80.7% of all the responses. Results obtained from logistics regression analysis indicate that clients' factors (p <0.001, OR=12.655, 95% CI [4.701-34.067]), and organizational factors (p <0.05, OR=2.541, 95% CI [1.079-5.985]), had a significant association with access to contraceptives.

5.3 Conclusion

This study sought to determine the factors that influence access to contraceptives among women of reproductive age in public primary care facilities in Kajiado Central Sub County. The specific objectives were to establish the influence of client factors, health workers', organizational factors and health communication on access to contraceptives by women in their reproductive age, in Kajiado central Sub-county, kajiado County. This study therefore concludes that;-

Client factors significantly influence access to contraceptives among women of reproductive age in public primary care facilities in Kajiado Central Sub County. This study established that religion or denomination; culture and traditions, myths and misconceptions and spousal or family approval significantly influences women's access to contraceptive. Some

denominations hinder women from up taking contraceptives, also culture and traditions and spouse are major facilitators or hindrances towards women taking up contraceptives.

Organizational factors significantly influence access to contraceptives among women of reproductive age in public primary care facilities in Kajiado Central Sub County. The organization factors taken into consideration in this study include the service delivery process, conducive environment and having no stock outs of contraceptives. Under service delivery process, the waiting time and convenience of the operating hours were taken into consideration. Conducive environment looked into the comfort of the waiting bay and observation room and the cleanliness of the facility including having clean running water and clean sanitary facilities.

Health workers and health communication did not significantly influence women's access to contraceptives of choice however where these two factors were taken into consideration in providing family planning services, women were more willing to access contraceptives, unlike where these two factors were not taken into consideration. The health worker factors to be taken into consideration include health workers being highly knowledgeable on the family planning methods including benefits and side effects, health workers counselling women before giving them family planning, being friendly and listening to clients, and health workers being adequate in number to handle all the clients in need of family planning. Under health communication, the key considerations to undertake include clients being aware of at least one family planning method that they can use, having knowledge that they can access contraceptives from a public health facility, being informed of the family planning methods available, being counselled before receiving family planning methods and receiving family planning methods of choice.

5.4 Recommendations

i. The health facilities lack adequate stocks of contraceptives. This could lead to fatal consequences such as unwanted pregnancies, unsafe abortions and could even lead to death. The National Government should ensure that all counties have adequate supply of contraceptives by adopting policies for the supply chain processes.

   The County Government should also ensure proper and accurate demand and forecasting for stocks and improve the inventory management to avoid stock outs. They should also adopt an automated system to reduce human intervention.

ii. Health workers are not adequate in number leading to long waiting time and long ques for the clients accessing family planning services. Therefore, the County government should facilitate proper planning and scheduling of health workers to ensure adequate coverage for the services to clients.

iii. Clients should be educated more to demystify the cultural believes, myths and misconceptions surrounding contraceptives access. Specifically, they should be educated on the possible side effects, the belief that contraceptives may lead to infertility and loss of sexual desire should be clarified. Male spouses to be invited to accompany their partners when seeking FP services.

iv. The health workers counsel clients before giving contraceptives, they also are friendly and listen to clients. This practice should continue being encouraged and natured to improve quality of service through in-service trainings and seminars

5.5 Recommendations for Further Research

This study recommends a qualitative approach to similar studies in other sub counties in Kajiado County and if within the same sub county, it will be paramount to research on different variables as this is expected to draw more insights from the respondents.

Further, a similar study could be undertaken with the target population being the health care workers offering contraceptive services, this will be important in complementing the findings of this study as study of health workers will help to identify the gaps in knowledge skill mix and competency in improvement of access to contraception.

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APPENDICES

Appendix I: Informed Consent

Kenya Methodist University

P. 0 Box 267-60200

MERU, Kenya

SUBJECT: INFORMED CONSENT

Dear Respondent,

My name is Beatrice A Alukwe I am a Masters student from Kenya Methodist University. I am conducting a study titled: ***Health System Factors Influencing Access to Contraceptives Among Women of Reproductive Age in Public Primary Care Facilities in Kajiado County***. The findings will be utilized to strengthen the health systems in Kenya and other Low-income countries in Africa. As a result, countries, communities and individuals will benefit from improved access to quality primary health services. This research proposal is critical to strengthening health systems as it will generate new knowledge in this area that will inform decision makers to make decisions that are research based.

Procedure to be followed

Participation in this study will require that I ask you some questions. I will record the information from you in a questionnaire check list. You have the right to refuse participation in this study. You will not be penalized nor victimized for not joining the study and your decision will not be used against you nor affect you at your place of employment. Please remember that participation in the study is voluntary. You may ask questions related to the study at any time. You may refuse to respond to any questions and you may stop an interview at any time. You may also stop being in the study at any time without any consequences to the services you are rendering.

Discomforts and risks.

Some of the questions you will be asked are on intimate subject and may be embarrassing or make you uncomfortable. If this happens; you may refuse to answer if you choose. You may also stop the interview at any time. The interview may take about 40 minutes to complete.

Benefits

If you participate in this study you will help us to strengthen the health systems in Kenya and other Low-in-come countries in Africa. As a result, countries, communities and individuals will benefit from improved access to quality healthcare services.

Rewards

There is no reward for anyone who chooses to participate in the study.

Confidentiality

The interviews will be conducted in a private setting. Your name will not be recorded on the questionnaire and the questionnaires will be kept in' a safe place at the University.

Contact Information

If you have any questions you may contact the following supervisors:

1. Dr. Kezia Muthoni Njoroge

   Department of Health Systems Management

   Kenya Methodist University
2. Mr. Musa Oluoch

   Department of Health Systems Management

   Kenya Methodist University

Participant's Statement

The above statement regarding my participation in the study is clear to me. I have been given a chance to ask questions and my questions have been answered to my satisfaction. My

participation in this study is entirely voluntary. I understand that my records will be kept private and that I can leave the study at any time. I understand that I will not be victimized at my place of work whether I decide to leave the study or not and my decision will not affect the way I am treated at my work place.

Name of Participant……

Date……...

Signature…….

Investigator's Statement

I, the undersigned, have explained to the volunteer in a language s/he understands the procedures to be followed in the study and the risks and the benefits involved.

Name of Interviewer…….……

Date……..…….

Interviewer Signature……

Appendix II: Questionnaire

Questionnaire: No ……

Socio Demographic Characteristics

1. Age in years……
2. Marital status. Single ☐ Married ☐ Divorced ☐
3. Contraceptive Method currently in use…….
4. Number of children if any……
5. Level of Education
    a. Primary ☐
    b. Secondary ☐
    c. College ☐
6. Employment.
    a. Employed, ☐
    b. Self-employed, ☐
    c. un employed ☐
7. Household monthly income which I have control over…….
8. Please indicate (√) the extent to which you agree with the following statements with regard to Client factors affecting access to you contraceptives.

1=Strongly Disagreed; 2=Disagreed; 3=Not sure; 4=Agreed; and 5= Strongly Agreed

Client Factors that influence access of contraceptives	**SD**	**D**	**N**	**A**	**SA**
My denomination does not refuse women to use family planning					
I am aware of members of my denomination who use family planning					

There are other denominations that refuse women to use family planning					
Women still use family planning even when their denominations refuse them to do so					
My culture and traditions allow women to use modern contraceptives such as pills and injections					
My culture and traditions allow women to use traditional contraceptives such a herbs and withdrawal					
My partner is aware that I am using family planning					
My partner allows me to use family planning method of my choice					
Family planning has negative side effects on a woman					
Family planning may lead to infertility in women					
Family planning makes a woman to be promiscuous and to cheat on her spouse					
Family planning makes a woman loose desire for sex					

9. Please indicate (√) the extent to which you agree with the following statements with regard to health worker factors affecting access to you contraceptives.

1=Strongly Disagreed; 2=Disagreed; 3=Not sure; 4=Agreed; and 5= Strongly Agreed

Health Workers Factors	**SD**	**D**	**N**	**A**	**SA**
The health worker advises me on various methods of family planning and their side effects.					
The health workers advises me the benefits and side effects of family planning method to take					

The health worker counsels me before giving me family planning					
The health workers require an approval from my spouse or parents before I get family planning services					
The health worker asks me to take unnecessary test before giving me family planning services					
The health worker gives me the family planning method that I asked for					
The health worker informed me on the side effects of family planning method before giving me the Family planning					
The health workers who give family planning are very friendly					
The health workers who give family planning listen to us when we tell them what we need					
The health workers attend to me quickly whenever I access the facility for family planning services and I don't waste a lot of time waiting					
Getting family planning services at the hospital takes a short time					

10. Please indicate (√) the extent to which you agree with the following statements with regard to Organizational factors and access to you contraceptives.

SD=Strongly Disagreed; D=Disagreed; NS=Not sure; A=Agreed; and SA= Strongly Agreed

Organizational factors	**SD**	**D**	**NS**	**A**	**SA**
The waiting Bay and observation room is comfortable					
The waiting time is acceptable					
The operating hours are convenient					
The facility does not run out of stock for contraceptives					

1. The facility is clean Yes No
2. The facility has water and clean sanitary facilities Yes No

11. Please indicate (√) the extent to which you agree with the following statements with regard to Health system responsiveness factors affecting access to you contraceptives.

1=Strongly Disagreed; 2=Disagreed; 3=Not sure; 4=Agreed; and 5= Strongly Agreed

Health Communication	**SD**	**D**	**NS**	**A**	**SA**
I am aware of at least one family planning method that I can use					
If agreed/strongly agree, which one_____					
Contraception helps me in spacing my children and having a child when I want					
I know that I can get a contraception method from a public health facility					
The health worker informs me of all family planning methods available.					

The health worker tells me of the side effects of each method and the method of my choice					
I receive my choice of family planning method at this facility					
I receive counselling before I was given the family planning of choice.					
The public health facility always has the choice of method I require					

12. Please indicate (√) the extent to which you agree with the following statements with regard to accessing your contraceptives.

1=Strongly Disagreed; 2=Disagreed; 3=Not sure; 4=Agreed; and 5= Strongly Agreed

Statements					
Access to contraceptive	**1**	**2**	**3**	**4**	**5**
I get contraceptive method of my choice whenever I need					
This facility always has contraceptive commodities at all times					
I am counselled before I get contraceptive method					
I am given family planning options to choose from					
The contraceptive method I received is acceptable to me					
I am satisfied with the family planning services					
I always come back whenever I need family planning services					
I can refer a friend to this facility for family planning services.					

Thank you

Appendix III: Kemu Serc Approval

KENYA METHODIST UNIVERSITY
P. O. BOX 267 MERU - 60200, KENYA FAX: 254-64-30162
TEL: 254-064-30301/31229/30367/31171 EMAIL: serc@kemu.ac.ke

January 24, 2022 KeMU/SERC/HSM/1/2022

Beatrice Alukwe
Kenya Methodist University

Dear Beatrice,

SUBJECT: FACTORS THAT INFLUENCE ACCESS TO PREFERRED CONTRACEPTIVES AMONG WOMEN OF REPRODUCTIVE AGE IN PUBLIC PRIMARY CARE FACILITIES IN KAJIADO CENTRAL SUBCOUNTY, KAJIADO COUNTY

This is to inform you that Kenya Methodist University Scientific Ethics and Review Committee has reviewed and approved your above research proposal. Your application approval number is KeMU/SERC/HSM/1/2022. The approval period is 24th January 2022 – 24th January 2023

This approval is subject to compliance with the following requirements

I. Only approved documents including (informed consents, study instruments, MTA) will be used.

II. All changes including (amendments, deviations, and violations) are submitted for review and approval by Kenya Methodist University Scientific Ethics and Review committee.

III. Death and life-threatening problems and serious adverse events or unexpected adverse events whether related or unrelated to the study must be reported to KeMU SERC within 72 hours of notification.

IV. Any changes, anticipated or otherwise that may increase the risks or affected safety or welfare of study participants and others or affect the integrity of the research must be reported to KeMU SERC within 72 hours.

V. Clearance for export of biological specimens must be obtained from relevant institutions.

VI. Submission of a request for renewal of approval at least 60 days prior to expiry of the approval period. Attach a comprehensive progress report to support the renewal

VII. Submission of an executive summary report within 90 days upon completion of the study to KeMU SERC.

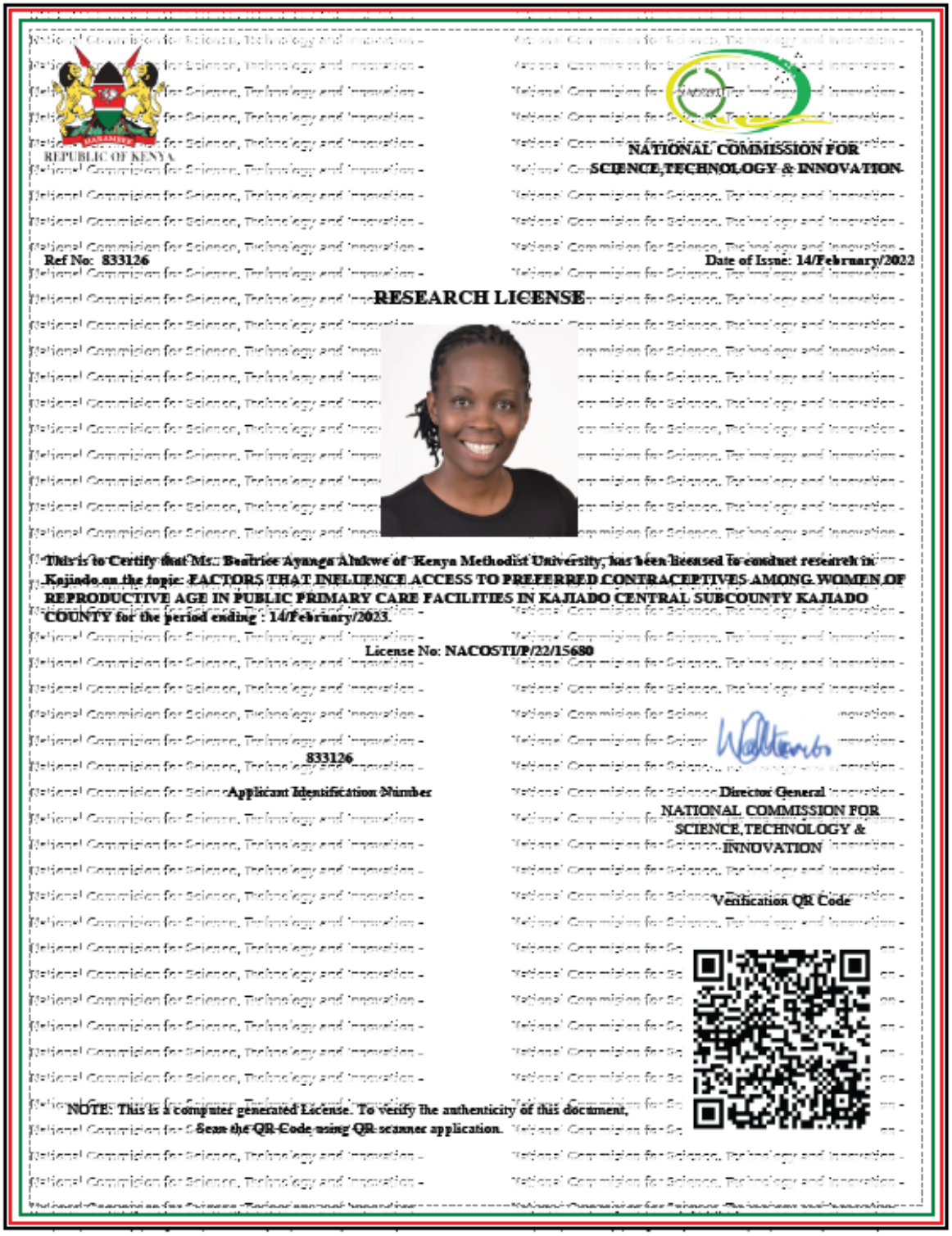
Prior to commencing your study, you will be expected to obtain a research license from National Commission for Science, Technology and Innovation (NACOSTI) https://oris.nacosti.go.ke and also obtain other clearances needed.

Yours sincerely,

KENYA MEDICAL RESEARCH INSTITUTE KEMU SERC 24 JUNE 2021 P.O. Box 267 - 60200 MERU

Dr. A. WAMACHI
Chair, SERC

Appendix IV: Nacosti Approval



REPUBLIC OF KENYA

NATIONAL COMMISSION FOR SCIENCE, TECHNOLOGY & INNOVATION

Ref No: 833126

Date of Issue: 14/February/2022

RESEARCH LICENSE

This is to Certify that Ms.: Beatrice Ayanga Alukwe of Kenya Methodist University, has been licensed to conduct research in Kajiado on the topic: FACTORS THAT INFLUENCE ACCESS TO PREFERRED CONTRACEPTIVES AMONG WOMEN OF REPRODUCTIVE AGE IN PUBLIC PRIMARY CARE FACILITIES IN KAJIADO CENTRAL SUBCOUNTY KAJIADO COUNTY for the period ending : 14/February/2023.

License No: NACOSTI/P/22/15680

833126

Applicant Identification Number

Director General
NATIONAL COMMISSION FOR SCIENCE, TECHNOLOGY & INNOVATION

Verification QR Code

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THE SCIENCE, TECHNOLOGY AND INNOVATION ACT, 2013

The Grant of Research Licenses is Guided by the Science, Technology and Innovation (Research Licensing) Regulations, 2014

CONDITIONS

1. The License is valid for the proposed research, location and specified period
2. The License any rights thereunder are non-transferable
3. The Licensee shall inform the relevant County Director of Education, County Commissioner and County Governor before commencement of the research
4. Excavation, filming and collection of specimens are subject to further necessary clearence from relevant Government Agencies
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6. NACOSTI may monitor and evaluate the licensed research project
7. The Licensee shall submit one hard copy and upload a soft copy of their final report (thesis) within one year of completion of the research
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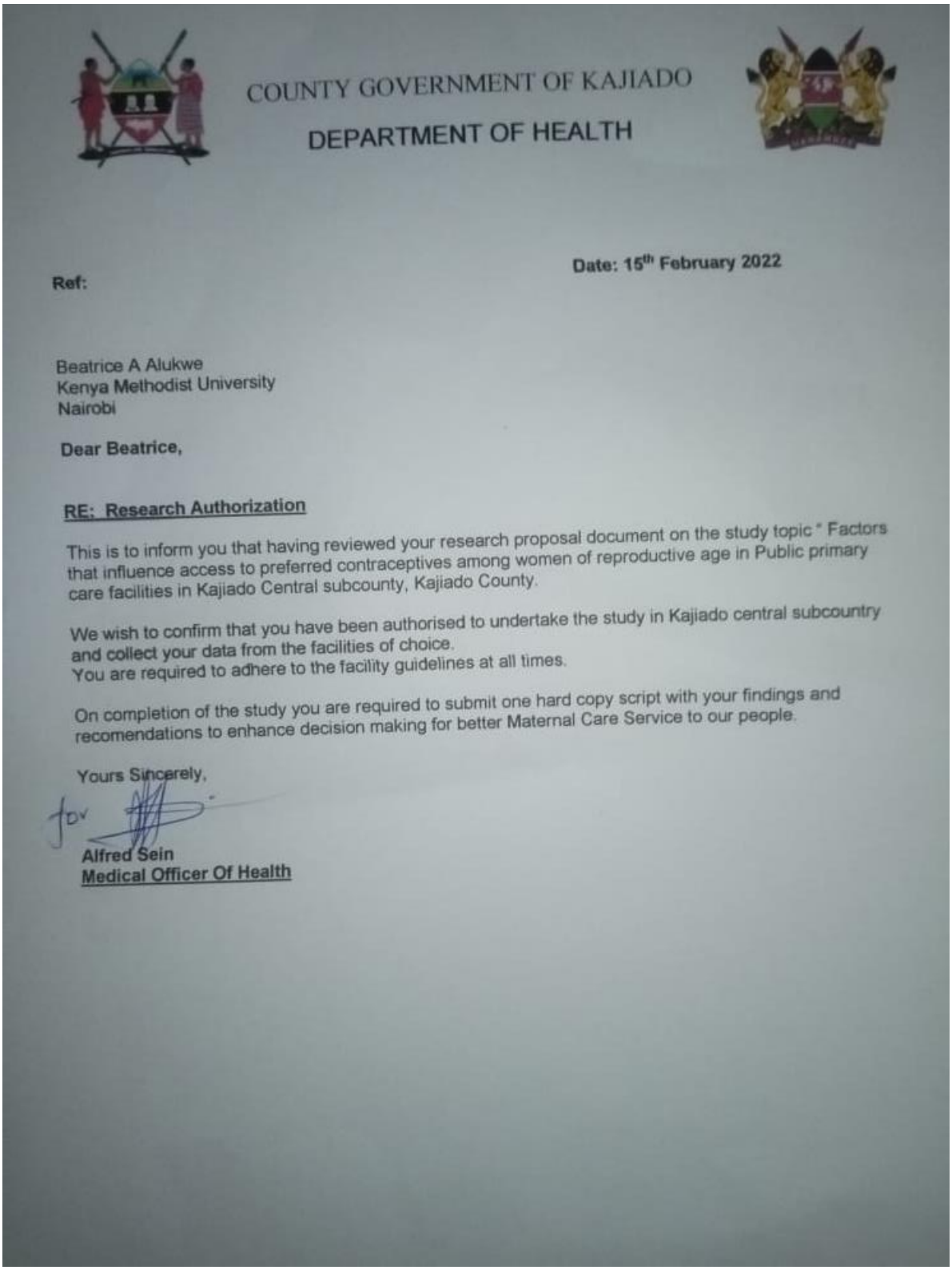
Website: www.nacosti.go.ke

Appendix V: Kajiado County Approval



COUNTY GOVERNMENT OF KAJIADO

DEPARTMENT OF HEALTH

Ref:

Date: 15th February 2022

Beatrice A Alukwe
Kenya Methodist University
Nairobi

Dear Beatrice,

RE: Research Authorization

This is to inform you that having reviewed your research proposal document on the study topic " Factors that influence access to preferred contraceptives among women of reproductive age in Public primary care facilities in Kajiado Central subcounty, Kajiado County.

We wish to confirm that you have been authorised to undertake the study in Kajiado central subcountry and collect your data from the facilities of choice.
You are required to adhere to the facility guidelines at all times.

On completion of the study you are required to submit one hard copy script with your findings and recomendations to enhance decision making for better Maternal Care Service to our people.

Yours Sincerely,

Alfred Sein
Medical Officer Of Health