FACTORS ASSOCIATED WITH THE UPTAKE OF FAMILY PLANNING SERVICES BY WOMEN ATTENDING MATERNAL CLINIC AT RONGO SUB-COUNTY HOSPITAL IN MIGORI COUNTY, KENYA

OTIENO CHURCHILL OCHIENG

A Research Thesis Submitted In Partial Fulfillment Of The Requirements For The Award Of The Degree Of Master Of Public Health (Epidemiology And Disease Control) Of Jaramogi Oginga Odinga University Of Science And Technology.

DECLARATION AND APPROVAL

Declaration

This thesis is my original work and has not been submitted for credit toward a degree in any university

Signature: …… Date: …….

Otieno Churchill Ochieng.

H152/4207/2017

Approval

This thesis was submitted with our approval as university supervisors.

Signature: ……. Date: ……

Prof. George Ayodo Ph.D.

School of Health Sciences

Jaramogi Oginga Odinga University of Science and Technology

Signature: …… Date: ……

Dr. Jane Owenga, PhD.

School of Health Sciences

Jaramogi Oginga Odinga University of Science and Technology.

TABLE OF CONTENTS

ACKNOWLEDGEMENT

I thank the Almighty God for His grace in bringing me thus far. All glory and honour go to Him. I am quite grateful to everyone who helped me with my studies in various ways, including moral, technical, spiritual and financial support. I am grateful to my supervisors, Prof. George Ayodo and Dr. Jane Owenga, for their insightful remarks, constructive criticism, advice, and support throughout the writing process. I am grateful to the Jaramogi Oginga Odinga University of Science and Technology's Research Ethics Committee for the ethical approval to conduct the study, as well as the Migori County Education office and the Rongo Hospital Sub-county for their assistance and support in carrying out the study. I would like to express my gratitude to the study participants for their cooperation in providing us with the essential data. I am greatly indebted to my family's wife Lilian Adhiambo and my children, Winston Churchill and Shanice Frida for their support and encouragement throughout my studies.

DEDICATION

I dedicate this work to my family wife Lillian Adhiambo, son Winston, and daughter Shanice for their tolerance, support, and encouragement during this endeavour.

ABSTRACT

Family planning services play a crucial role in improving the health of women and children in developing countries by providing safe and effective methods to reduce the number of births and high-risk pregnancies. Despite efforts to promote fertility control, a significant proportion of women in the reproductive age group (15-49 years) do not utilize family planning services, either due to non-use or ineffective use. In Kenya, the total fertility rate remains high at 4.6%, while the contraceptive prevalence rate (CPR) and unmet need for family planning stand at 46% and 24%, respectively (DHS 2022). However, in Migori County, the modern contraceptive uptake rate is 60.3%. This study aimed to examine the factors associated with the uptake of family planning services among 145 women attending maternal clinic at Rongo Sub-County Hospital in Migori County, Kenya. The research sought to determine the uptake of family planning services and identify socioeconomic and health facility factors influencing their utilization. A cross-sectional study design was employed, and participants were selected using systematic random sampling. Data was collected through questionnaires, interviews, and focus group discussions, with both primary and secondary sources utilized. Quantitative data analysis involved descriptive and inferential statistics, while qualitative data was organized into themes and patterns. The results revealed that 68.3% (99) of women in Rongo Sub-County utilized family planning services. The study also observed a significant association between culture, religious affiliation, and the utilization of family planning services (OR=5.413, p=0.033). Additionally, the method of family planning adopted was also found to influence its usage (AOR=1.74, p=0.051, 95% CI=-0.996-32.626). Women were less likely to use family planning services when facilities lacked skilled health providers (AOR=-2.26, p=0.003, 95%CI=-3.02-0.463). These findings emphasize the importance of public sensitization, involving both women and men, to increase the acceptability of modern family planning services. Adequate staffing of health facilities and comprehensive counselling services are also recommended to ensure the proper administration of family planning services.

LIST OF TABLES

LIST OF FIGURES

LIST OF ABBREVIATIONS

ABM:	Andersen's Behavioral Model
ANC:	Antenatal Care.
CPR:	Contraceptive Prevalence Rate
CI:	Confidence Interval
CPR:	Contraceptive Prevalence Rate
DHS:	Demographic and Health Survey
FGD:	Focus Group Discussion
FP:	Family Planning
HCW:	Healthcare worker
HCP:	Health care provider
IMR:	Infant Mortality Rate
IUCD:	Intra-Uterine Contraceptive Device
KDHS:	Kenya Demographic Health Survey
KII:	Key Informant Interviews
KNBS:	Kenya National Bureau of Statistics
LAPM:	Long-Term and Permanent Methods of Family Planning
LARC:	Long-acting and reversible contraceptives
RL4H	Rongo level 4 Sub-county hospital
MMR:	Maternal Mortality Rate
MoH:	Ministry of Health
NACOSTI:	National Commission of Science, technology, and Innovation
TFR:	Total Fertility Rate
WHO:	World Health Organization

DEFINITION OF TERMS

Contraceptive: A device, drug, or chemical agent that prevents conception.

Contraceptive Prevalence Rate: The percentage of married women between the ages of 15-49 using family planning.

Family Planning: According to WHO, "family planning is allowing individuals and couples to anticipate and attain the desired number of children and the spacing and timing of their children through contraception and treatment of involuntary infertility."

Total Fertility Rate - The average number of live births a woman would have in her lifetime

Uptake: taking up or making use of something available.

Unmet need for family planning – refers to those women who prefer to space or limit childbearing but are not using any effective modern contraceptive to fulfil their desire.

Unwanted pregnancy: Pregnancy that is unplanned and thus not needed.

Knowledge: refers to familiarity, awareness, information, and understanding of FP.

Reproductive Health: a condition of total physical, mental, and social well-being, rather than only the absence of disease or infirmity, in all reproductive aspects.

Women of reproductive age - Women between the ages of 15 and 49 who are at risk of becoming pregnant if they are not using contraception; women of childbearing age.

Health system factors - Infrastructure and resourcing in health care (economic, human, facilities, sites, equipment), health worker education and workforce trends, social determinants of health Factors of social, cultural, and economic importance - Interdependence of forces within community ideas and preferences, as well as issues such as income, housing, transportation, and social support.

CHAPTER ONE
INTRODUCTION

1.1 Background Information

Family planning (FP), allows individuals and couples to anticipate and attain the desired number of children and the spacing and timing of their children through contraception and treatment of involuntary infertility, has been recognized by the World Health Organization (WHO) as one of the crucial reproductive health interventions required to achieve safe motherhood by lowering maternal and infant mortality (WHO, 2018). According to the United Nations (2019), 1.1 billion women are thought to require or use FP globally. Nearly 80 million of these people choose classic FP approaches over contemporary ones, indicating an unmet need for FP. According to Beringia *et al.* (2019), the usage of family planning has significantly expanded in many developing nations and is now on par with that in several wealthy nations.

Proper access to family planning services is still critical as a public health intervention because it offers women a sense of empowerment while bringing down the number of unintended pregnancies, population increase, and infant and maternal deaths (Akamike *et al.,* 2020). Even though family planning services are more generally available, there are still a lot of unmet needs in the world (Choe *et al.,* 2021). A sizable population in developing nations still lacks proper or sufficient access to modern contraception, despite their desire to use family planning tools and services (Atuhairwe *et al.,* 2023). Despite their desire to use family planning supplies and services, a large segment of the population in developing countries still lacks access to contemporary contraception (Atuhairwe *et al.*, 2023).

The pill, intrauterine devices, implants, injectables, condoms, and sterilization are some of the most commonly employed methods that are in use by married women in the world 62% of those aged 15 to 49 years (Atuhairwe *et al.*, 2023). Due to variances in access to, availability of, and demand for conventional methods of contraception, these rates are twice as high among women in the circles of high-income areas in high-income countries at 67% and 60%, respectively, as compared to those in low-

income countries 34% and 29%, respectively (Basset *et al.*, 2023). Utilizing modern techniques, the demand for contraceptive treatments has been gratified globally. Women should be informed, educated, and counselled on how to utilize contraceptives in light of the rising demand for them. As a result, the total demand will rise and the unmet requirement will be lessened (Chace *et al.,* 2021). In most parts of the world, at least one out of every ten married or childbearing women wish to delay or stop having children but do not use any kind of contraception to avert further births (Baruwa *et al.,* 2022).

A study from Nigeria that provided sufficient data was located and used for this review (Default *et al.*, 2019). In the studies under consideration, family planning uptake ranged from 10.3 to 66.8%. Client-related issues include those involving education, the desire for more children, the uncertainty of the necessity, partner disapproval, previous side effects, religious views, culture disapproval, age, marital status, wealth index, residency, ignorance, humiliation, domestic violence, and sexual element. A few of the factors related to health services that have been acknowledged are cost, access issues, and procurement challenges (Akamike *et al.,* 2020). In Tanzania and Uganda, the proportion of women reporting unplanned pregnancies has grown since early 2000 declined in Kenya and Ethiopia since that time, and remained steady in Rwanda, according to Chen *et al.* (2020).

Kenya, Rwanda, and Uganda now have the highest percentages of reporting unplanned pregnancies among women of reproductive age, while Ethiopia and Tanzania have the lowest rates. The prevalence of contraception and the rate of unintended pregnancies in the subregion are complicatedly correlated. Nearly half of pregnancies in Kenya are regarded as "unwanted" (Dulli *et al.,* 2019). By preventing complications during pregnancy and childbirth, safe abortions save lives, and family planning techniques reduce the incidence of unintended pregnancies (Fotso *et al.,* 2023). While over 2,600 women are away as a direct result of improper abortions performed in dangerous settings, over 21,000 women are hospitalized due to complications associated with abortions. It is estimated that in this country unsafe abortions account for 35% of maternal mortality. This exceeds the 13% global

average by a wide margin. Low rates of contraceptive use and understanding are contributing factors (Gottschalk *et al.*, 2022).

In underdeveloped countries, a lack of access to family planning contributes to a high rate of unintended pregnancies, unsafe abortions, and indirect maternal deaths. A general correlation between this and neonatal deaths among the poor may exist (Kenny *et al.*, 2022). Despite all of these problems, not much study has been done to assess the low uptake of family planning (Akoth et al., 2021). Kenya has a higher rate of modern contraception use than the rest of Sub-Saharan African countries. The uptake, however, has recently slowed down, which has been attributed, among other things, to supply chain issues and a rising shortage of family planning supplies (Tomlinson et al., 2023). In 2021, traditional or modern methods of contraception were used by nearly 44% of Kenyan women between the ages of 15 and 49 (Githinji *et al.*, 2022). Among Kenyan women who were married or in relationships, the prevalence of contraception was greater, nearing nearly 60%. The rate for single women, on the other hand, was almost 23% (Githinji *et al.*, 2022). The nation's general rate of contraceptive use has marginally increased regardless of marital status. In Kenya, however, roughly 35% of women of childbearing age used some form of contraception in 2010. The percentage of married women was 48% (Amo-Adjei *et al.*, 2017). The prevalence of contraceptive use, social-economic characteristics, and health facility factors that affect the use of family planning services are being investigated among women who attend the Clinic at Rongo Sub-County Hospital to fill this research gap.

1.2 Statement of the Problem

Family planning (FP) is essential for safeguarding individual health rights and enhancing women's quality of life, but women have the highest unmet demand for it. The increased unmet need for FP services despite rising demand is evidence that Kenyan women experience particular challenges in achieving their family-size objectives (Owuor, 2020). However, they typically do not receive the FP services that are required to promote birth spacing or to lower unintended pregnancies and their unfavourable effects. When a woman gets pregnant, she runs the risk of having bad

health outcomes for both herself and the unborn child. These risks include the possibility of a mother having an unsafely instigated abortion as well as the likelihood of a stillbirth, a premature birth, a low birth weight, and an unborn child who is undersized for the gestational age (Moon *et al.*2021).

Despite efforts to improve maternal health, low rates of FP service uptake persist in the Rongo Sub-county (Williams *et al.,* 2022). Despite a total fertility rate of 4.5, which is expected to be relatively low, a low per capita income, and a high child mortality rate, Rongo Town's population has expanded by 62% in the last ten years (KBNS, 2019). The nation's rapid population expansion exacerbates a cycle of poverty for women that includes unintended pregnancies, poor health, inadequate nutrition, a lack of access to education, and rising living costs (Thomas *et al.,* 2022). Despite all of these problems, research that examines what factors associated to the uptake of family planning Services.

1.3 Research Objectives

1.3.1 General objective

To investigate the factors associated with the uptake of family planning services among women attending the Maternal Clinic at Rongo sub-county hospital, Migori County, Kenya.

1.3.2 Specific Objectives

1. To determine the uptake of contraceptives among women attending the maternal clinic at Rongo Sub-County Hospital
2. To determine the social-economic factors influencing the uptake of family planning methods among women attending the maternal Clinic at Rongo sub-county Hospital
3. To determine the health facility factors that influence the uptake of family planning services among women attending the maternal clinic at Rongo Sub-County Hospital

1.4 Research Questions

1. What is the uptake of contraceptives among women attending the maternal clinic at Rongo Sub-County Hospital?
2. What are the social-economic factors that influence the uptake of family planning methods among women attending the maternal clinic at Rongo Sub-County Hospital?
3. What are the health facility factors that affect the uptake of family planning among women attending the maternal clinic at Rongo Sub-County Hospital?

1.5 Justification of the Study

Despite an increase in the use of FP services, the frequency of unmet family planning services is rising, suggesting that Kenyan women experience challenges in achieving their reproductive goals and having the desired number of children. The Rongo sub-county health department must have a logical understanding of these aspects related to the use of FP services and the characteristics of women with unmet requirements to monitor family planning programs and formulate population policy.

The goal of the current study was to better understand what influences women who visit maternal clinics at Rongo Sub-County Hospital in Migori County to use family planning services. The results of this study will be used to guide decisions about how to increase family planning use in Migori County and Rongo Sub-County Hospital. Unwanted pregnancies and child and maternal mortality will decrease with well-planned programs on FP care. This will be accomplished by educating decision-makers and healthcare professionals about the best ways to focus their efforts and allocate the available personnel and financial resources to enhance the health outcomes of women in Rongo Sub-County Hospital and Migori County.

1.6 Significance of the Study

To inform health service interventions, factors related to family planning service use among women visiting the maternal Clinic at Rongo Sub-County Hospital were evaluated in this study. By preventing high-risk pregnancies in women with specific health condition features or by preventing unintended pregnancy, family planning

services greatly lower the risk of maternal, baby, and child disease and health. The regular prevalence of family planning service use acts as a key evaluation tool for national FP services programs since it aids in monitoring and evaluating implemented tactics. In addition, if the need for family planning is addressed, the health of the family will improve and the adverse consequences of unintended pregnancies, like maternal mortality and unsafe abortion, can be avoided.

The results of this study will be used by program designers and policymakers to define upcoming actions that can be used to reduce demand for FP services. This study will also benefit the healthcare professionals (HCWs) who work with these women directly since it will assist them in creating practical plans for improving service delivery in the hospital and the community. The study's findings can be used to increase awareness, strengthen family planning initiatives, challenge erroneous risk perceptions, and encourage the use of family planning services. This will decrease the number of unintended pregnancies, abortions, and the percentage of high-risk births among women across the nation, especially those residing in Rongo town.

1.7 Limitations of the Study

Limited access to information made it difficult to conduct this study; respondents were hesitant to give information out of fear that top County management may use it against them. Moreover, the Migori health offices have been plagued by frequent strikes and misunderstandings for more than two years. However, this was overcome by treating the information as confidential and not allowing participants to use their names. Men were not included in the study, which was a mistake because their participation could have shed light on the variables influencing the use of family planning services. However, this was avoided by enquiring as to whether their partner agreed to use family planning services.

CHAPTER TWO
LITERATURE REVIEW

2.0 Introduction

A thorough history of the empirical research is provided in this chapter, along with a critique of the theory proposed to explain the relationships between the study's variables. A variety of sources, including books, journals, reports, and the internet, are used to compile the literature review. Furthermore, it helps scholars and others learn more about the Rongo Sub-County Hospital. Inaccessible family planning services for women.

2.1 Family Planning Services.

Kenyan government has implemented a family planning program, due to the growing population and a weak economy. Even though the global percentage of women who have access to and use contraception has significantly increased, there are still over 137 million people in developing countries who would like to delay or forego having children but are unable to do so (Gill *et al.,* 2017). If a sexually active woman wants to put off or avoid getting pregnant but isn't using contraception, she's said to have an unmet need for family planning (Akoth *et al.,* 2021). The discrepancy between women's reproductive intentions and contraceptive behaviour is measured using the responses women give to questions about their sexual orientation and birth control methods (Adkoli *et al.,* 2022).

If a sexually active woman wants to put off or avoid getting pregnant but isn't using contraception, she's said to have an unmet need for family planning (Akoth *et al.,* 2021). The discrepancy between women's reproductive intentions and contraceptive behaviour is measured using the responses women give to questions about their sexual orientation and birth control methods (Adkoli *et al.,* 2022). According to Choe et al. (2021), 25.9% of postpartum women were unsure about their preferred method of birth control. However, only 3.8% of people chose a permanent method of contraception, compared to 19.2% who preferred the subdermal implant, 18.4% who preferred injectables, 14.7% who preferred an intrauterine contraceptive device, 7.9% who preferred a natural approach, 5.6% who wanted to use male condoms, and 4.14

percent who preferred an injectable (Onyango *et al.,* 2022). Despite the lack of clarity surrounding the relationships between unmet needs, abortion rates, and contraceptive use, the staggering number of abortions performed each year is compelling evidence that millions of women around the world are interested in birth control but are not actively seeking out modern methods of doing so (Ontario *et al.*, 2020). Unmet needs may result in fewer unintended pregnancies, abortions, and high-risk pregnancies to enhance maternal health and survival, according to studies. Additional benefits of family planning for health, society, and the economy include a decline in infant and child mortality rates, a decrease in HIV transmission (through the consistent and proper use of condoms), the advancement of gender equality, a decrease in poverty, and a quickening of social and economic growth (Owuor, 2020).

Despite extensive marketing, the overall rate of met need for this method of contraception has not increased. However, the extent to which actual demands are not met varies significantly by region (Thiongo *et al.,* 2022). Family planning services are still greatly needed by women of all ages, socioeconomic statuses, and educational levels, with huge gaps existing between those with the highest overall number of children still alive, the lowest levels of education, the fewest number of birth control options available, and the lowest wealth quintiles (Thomas *et al.,* 2022). Female sterilization, also known as tubal occlusion (TO), can be used as a method of family planning if the woman consents. If you are not breastfeeding after delivery, progestogen-only approaches can be used. Six months later, combined oral contraceptives can be started (Tomlinson *et al.,* 2022).

2.2 Prevalence of women using family planning services

Unmet family planning needs, according to KDHS (2022), refer to women of childbearing age who do not use any form of family planning but want to put off or stop having children altogether. 57% of currently married women who use a contraceptive method do so today. 70% of sexually active, unmarried women between the ages of 15 and 49 use contraception, with modern methods accounting for 59% of their use. In comparison to married women, sexually active single women use traditional methods more frequently at 11% versus 6%, respectively (Williams et al.,

2022). Among women who are already married, injectables (20%), implants (19%), and contraceptive pills (8% usage) are the most common methods. Male condoms are the most often used form of contraception among sexually active, unmarried women (20%), followed by injectables (16%) and implants (11%) (Winston *et al.*, 2018).

The proportions of women who are currently married and use a modern method are lowest in Mandera (2%), Wajir (3%), Marsabit (6%), Garissa (11%), and Embu (82%) respectively (Kenny et al., 2022). Between 1993 and 2003, there was no discernible change in the percentage of married women who use modern methods of contraception. But since then, it has steadily increased, from 32% in 2003 to 39% in 2008–09, 53% in 2014, and 57% in 2022. Family planning is currently more desired by married women than it is by sexually active, unmarried women, who are more likely to demand it at a rate of 66%. 14% of currently married women and 19% of sexually active single women have unmet family planning needs (Githinji *et al.*, 2022). Between 1993 and 2022, there has been an overall rise in the demand for family planning. The unmet need decreased from 35% to 14% during that time (Eastment *et al.*, 2022).

In the highest income quintile, the proportion of currently married women who do not have access to family planning services drops from 22% to 10%. The counties with the greatest unmet family planning needs, according to Lahiri *et al.* (2023), are Marsabit (38%), Tana River (34%), West Pokot (30%), Samburu (29%), Siaya (27%), and Isiolo (27%). With increasing education levels, the proportion of currently married women who have unmet family planning needs declines, falling from 23% among those with no education to 10% among those with more than a secondary education (Ondenge et al., 2021). The total demand for family planning is lowest (age 15–19) highest (age 35–39) and highest (age 45–49) respectively among women in their reproductive years (Ontario *et al.*, 2021).

Urban versus rural living does not significantly affect the demand for family planning, although regional demand varies greatly. Eastern has the most demand (83%) while North Eastern has the lowest (33%). In comparison to their more educated or

wealthier counterparts, 60% of women in the lowest wealth quintile and 47% of women without an education have a reduced demand. However, 25% of married women's needs for family planning services have gone unmet because of issues with the country's health system that may have had an impact on family planning programs (Ormel *et al.,* 2021). Women who use family planning services have a significant unmet need for techniques of spacing and limiting (Williams *et al.,* 2022). Given their high unmet demand and the benefits of longer pregnancy intervals, postpartum women should be encouraged to use contraception as much as, if not more than, non-postpartum women, and usage barriers ought to be researched further (Sila *et al.,* 2020).

2.3 Socio-economic Factors Influencing the Uptake of family planning services

Women between the ages of 31 and 35 who intended to use family planning methods had completed post-secondary education, had 2 to 4 children who were still living, had been married for two to five years, identified as Christians, and had 2 to 4 children who were still living. This shows that the adoption and use of FP are significantly influenced by the women's age, parity, religion, level of education, and length of marriage (Thiongo *et al.,* 2022). Women's education level, socioeconomic status, age, religion, media exposure, the number of children still alive, and use of reproductive health services were all strongly correlated with family planning use (Tomlinson *et al.,* 2023). Massive disparities in access to contraception exist in low-income communities. Couples who want to have fewer children are unable to do so because there aren't enough resources for family planning and the existing programs aren't very good. In Sub-Saharan Africa, marriage and childbirth are becoming more unpredictable (Thomas *et al.,* 2022).

Cultural norms, such as the degree to which women are allowed to make decisions about their own lives, have an impact on demographic and sociological factors such as the number of children who survive to adulthood, the age of the mother, the age of the bride, the preferences of the son, and demographic and sociological aspects (Rogers et al., 2022). Low health-seeking behaviours among women, particularly regarding contraception and family planning, are also associated with their lack of

autonomy (Owuor, 2020). Sometimes, men in polygamous relationships marry women who are even less educated, which limits public access to information about FP and influences their opinion of current FP practices (Sedlander *et al.,* 2021). Women in polygamous marriages are also more eager to have children because doing so will help them advance socially within the community. To command respect from society, men in polygamous marriages need to have more children, which raises the possibility that modern FP practices will be viewed negatively (Rogers *et al.,* 2022).

In a study of young women in Kisumu County, it was found that social support or a lack of it had a significant impact on whether or not they used contraception (Kungu *et al.,* 2022). A Kenyan study discovered that Catholics were significantly more likely to use birth control than members of other Protestant groups, despite the Catholic Church's opposition to the practice. Because God controls a woman's capacity to conceive, Muslims consider the use of contraception to be an insult to Him. Numerous conclusions have been drawn from studies looking at how religion influences the use of contraceptives (Lahiri *et al.,* 2023).

When their parity increases, women are more likely to use contraceptives. In Kenya, where the average age at first marriage is 17.9 years, young women are expected to demonstrate their fertility as soon as they get married (Roche *et al.,* 2022). Early marriage exposes these women to frequent and unprotected sexual activity, which could result in a preterm and dangerous first delivery because using contraceptives before marriage is not expected. Additionally, there isn't much room for these women to space out their pregnancies. Marriage hints that women are potentially exposed to becoming pregnant regularly. This is a result of married women engaging in high levels of sexual activity (Onyango *et al.,* 2022). Contraceptive use was more common among married women than among unmarried women, according to a survey carried out in Kenya's major cities. Furthermore, women who lived with their partners used contraceptives more frequently than women who did not (Ontario *et al.,* 2020). Women may be reluctant to seek out family planning options out of fear of judgment from their friends or loved ones. In some societies, contraception is demonized as a potential contributor to issues with maintaining chastity in the bedroom. Married

women may need their husbands' permission before using contraception or participating in family planning programs (Ondenge *et al.*, 2021).

There is a strong correlation between per capita income and the acceptance and awareness of family planning methods. Higher levels of family planning education and practice are associated with higher monthly income (Mugwanya *et al.*, 2021). The employment status of women had an impact on FP adoption. Lahiri *et al.* (2023) found that employed women were more likely to adopt FP. The occupation of women, which frequently has an impact on decision-making, affects the uptake of FP. It has been demonstrated that having a job raises women's status and gives them more autonomy in making decisions (Long *et al.*, 2022). Higher levels of education among women are associated with lower rates of community service, family size, and food insecurity in a particular location (Moon *et al.*, 2021). Additionally, women who were employed showed a higher propensity to use FP than those who were not (Moon *et al.*, 2021). Women's employment and an unmet demand have been linked in some studies. Women who work have very different needs than housewives or office workers (Dev et al., 2021).

2.4 Health Facility Factors Influencing the Uptake of family planning services

The perception of risks and benefits, worries about the impact of side effects on daily life, and assessments of how specific methods may affect relationships with partners or other family members can all have an impact on women's decisions to use, not use, or stop using contraceptives (Githinji *et al.*, 2022). The inability of young people to access family planning and reproductive health services worsens some reproductive health issues, such as unintended and spaced-apart pregnancies, delivery complications, maternal mortality and morbidity, unsafe abortions, and sexually transmitted infections, according to a study carried out in Jimma, Ethiopia. Husband opposition and spousal communication also affected access to contraceptives and family planning services. A health system's overall quality is influenced by a variety of factors, including infrastructure, standards and guidelines, medications and supplies, and the availability of family planning commodities and supplies. Family planning services for women, however, are greatly influenced by the specialists who

provide them. How people choose to plan their families is directly influenced by the degree to which services are of excellent quality (Kenny *et al.,* 2022).

According to research, medical professionals influence their patients' decisions to utilize contraception after giving birth. An observational study carried out in Burkina Faso discovered that women were more likely to begin using contraceptives after giving birth when healthcare professionals regularly and freely discussed family planning alternatives with their patients. Despite being aware of the many contraceptive options, many women do not use them because of worries about potential health hazards, according to research (Ontario *et al.,* 2021). According to a Nigerian study, 40% of the women surveyed said they did not visit the clinic nearest to their homes because there were insufficient better options available (Adkoli *et al.,* 2022). This finding contrasts with the finding that those within a distance of less than 5 km away were more likely to use family planning methods as opposed to those within a distance range of more than 5 km. Women in Northeastern Kenya are more likely to give birth at home if they live more than one kilometre from a healthcare facility, with the likelihood of facility delivery decreasing with increasing distance (Britton *et al.,* 2022). Distance and lack of transportation are the main barriers to receiving medical care for women. In a related study, the India Institute of Medical Sciences discovered that a woman's decision to seek medical attention when she had to travel from one of four states to a government hospital in New Delhi was directly correlated with the one-time cost (Msovela *et al.,* 2022).

Poverty is another factor that contributes to high fertility rates, claims Ocholla-Ayayo (2017). Low-income families are burdened with a significant amount of dependency ratios as a result. The money is spent on needs like food, school costs, burial costs, housing, and clothing; nothing is invested or done to enhance living conditions. According to a study conducted in Kenya, several treatment options were rejected because they were linked to poor health, infertility, birth abnormalities, infidelity, and promiscuity (Mugwanya *et al.,* 2021). The use of family planning services is influenced by inadequate information on the negative effects of contraceptives, according to a study conducted in Nyanza, Kenya (Obat *et al.,* 2021).

The chapter offers a thorough history of the empirical research as well as a critique of the theory put out to explain the relationships between the study's variables. The literature review is put together using a variety of sources, including books, journals, reports, and the Internet. Additionally, it assists researchers and others in learning more about the Rongo Sub-County Hospital women who lacked access to family planning services.

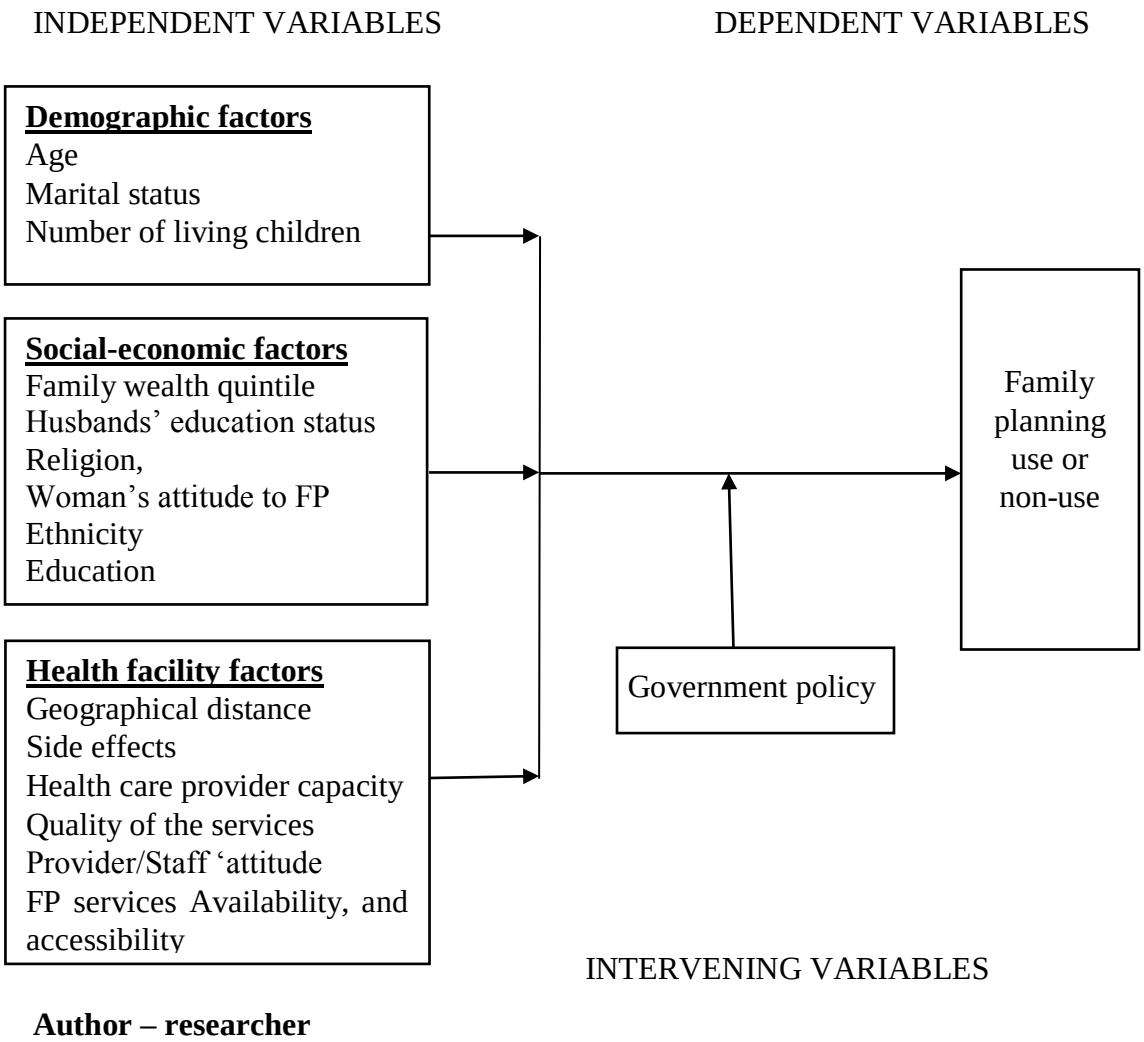
2.5 Theoretical Framework

The theoretical foundation of this study is Andersen's Behavioral Model (ABM) of Health service use. Since it was first stated in the 1960s, this edifice has undergone some alterations (Andersen, 1995). This framework aims to aid comprehension. Anderson started by studying the dynamics of families. Later, he changed his attention to the individual as the analytical unit, using the framework to look at what influences people's usage of healthcare. According to ABM, a variety of variables, such as the environment, the features of the people, one's health, consumer satisfaction, and the caliber of the service, all influence whether or not a service is used (Habibov & Fan, 2008). By applying this model, people can obtain the healthcare they require by taking into account their inclination to use healthcare services, any obstacles to doing so, and the advantages of receiving healthcare (Anderson, 1968). Predisposing factors, another name for this pattern, are sometimes taken to mean a person's sociocultural context before the beginning of the sickness. The practical components of receiving health care, such as access to FP services, financial resources, the availability of facilities and staff, and the amount of time spent in waiting rooms, are therefore considered enabling factors. Health issues that require seeking medical attention are only one of many examples of need factors that might operate as a direct impetus for using medical services (Andersen, 1995). For instance, a woman's choice to utilize FP might be impacted by her preferences or prior pregnancies and deliveries. As a result, the feeling of shortage encourages people to seek FP assistance. The environmental factors include the external environment and the healthcare system, have an impact on health behaviour, including personal health habits and the use of health services and personal

characteristics (i.e., a person's belief of the need for treatment, the likelihood that they will use services, and their assessed and professed health status).

2.6 Conceptual Framework

The various connections between the variables that predispose the variables linked to the consumption of family planning services are shown by the operational conceptual framework (Figure 2.1). It describes all of these factors and offers a framework for mitigating the low uptake of family planning services in the Rongo Sub-County. Dependent variables, intervening variables, and independent variables make up this system. Demographic variables like age, marital status, education level, religion, income source, and household income are examples of background factors. The framework shows how family planning service uptake is influenced by social and economic factors, health facility parameters, and their interactions. The interconnection of various framework elements results in factors related to the adoption of family planning services, which in turn raises the fertility rate. All of factors would aid in developing the most effective strategies for raising the adoption of FP services and examining their impact on women in the Rongo Sub-County who are of reproductive age.



Author – researcher

Figure 2. 1: *Conceptual Framework*

CHAPTER THREE:
METHODOLOGY

3.0. Introduction

This chapter outlines the methods that were used in this study. It includes the study design, study area, population, inclusion and exclusion criteria, sampling techniques, research tools and instruments, data analysis, and presentation techniques.

3.1. Study Area

Rongo Sub County is located in Migori County in western Kenya. Its latitude and longitude, according to MOS, are 0^0 42 '13" S and 340 52.2'30" E. (2008). The Rongo Sub County is located at 1700 meters above sea level. Its area is 22 square kilometres. The three sub-locations of Rongo Town are Kabuoro, Koderobara, and Kanying'ombe, respectively. The population as per the Kenyan census for 2019 is 124,587 people and 29,087 households (KNBS, 2019). Farming is the main economic activity because of the abundant and consistent rainfall that sustains crops including beans, maize, groundnuts, sugarcane, potatoes, and poultry farming.

The developing Rongo metropolitan sub-county was chosen for this study because it has four pharmacies, six health facilities, and four hospitals that cater to both urban and rural inhabitants. The Rongo level 4 Sub-county hospital (RL4H) in Migori County provides care for about 45,000 people. Rongo County was chosen as the ideal study location because it has both slum and non-slum settlements. Furthermore, is home to a wide range of socioeconomically diverse ethnic groups, which was important for the study examination of factors associated with women use of family planning services?

3.2 Study Design

The study adopts a descriptive cross-sectional design. This was done using both quantitative (self-administered questionnaires) and qualitative (key informants) techniques. This method was effective in helping the researcher compile data on the variables influencing the use of family planning services. Information was gathered in March of 2021.

3.3 Study Population

The target population for this study included women of reproductive age (between 15 to 49 years) who regularly attended outpatient and inpatient maternal clinics at Sub-County Hospital, in Rongo Sub-county.

3.4 Inclusion Criteria

- Female patients who had lived in Rongo Sub-County for the preceding three years and attended maternal clinics at the hospital serving Rongo Sub-County.
- Females aged 15 to 49 who consented to the study were interviewed.

3.5 Exclusion Criteria

- Females who needed to be involved but declined to sign consent documents.
- Females over 49 who do not require family planning services.

3.6 Sample Size Determination

A 2018 Sample size in the study was determined using a single proportion formula (Cochran, 1977). As follows,

$$n_0 = \frac{Z^2(p)(q)}{e^2}$$

Where:

n_0- sample size when the population is more than 10,000

$\boldsymbol{p}$-The is the estimated proportion of the population with the desired characteristics 60.3% which is the contraceptive prevalence rate in Migori County (KDHS, 2022).

q- Is the proportion of the population estimated not to have the desired characteristics whereby (q=1-p). Hence found to be 39.7% or 0.397.

z- The number relating to the degree of confidence. This study will base a 95% degree of confidence, i.e., 1.96 deviates.

e- Margin of error that was accepted in the study. This study adopted a 5% degree of error (0.05)

Therefore, $n_0 = \frac{1.96^2(0.603)(0.397)}{0.05^2}$

$$= \frac{3.8416(0.603)(0.397)}{0.0025}$$

n_0= 368 women

The study used the reduced sample, $nf = \frac{n}{\left(1+\frac{n}{N}\right)}$.

Where:

nf is the final sample size of the population of less than 10,000;

N is the desired sample size when the population is more than 10,000;

n is the estimated study population.

In 2020, Rongo Sub-County Hospital provided family planning services to 2,420 patients, for an annual average of 202 women,$\left(\frac{2,420}{12}\right)$ per month. For this study, the researcher estimated the population to be 202 because data collection occurred within a month (N). Since there are fewer than 10,000 people in the total population of 202, the desired sample size (*nf*):

$nf = \frac{n}{\left(1+\frac{n}{N}\right)}$

$$nf = \frac{368}{\left(1 + \frac{368}{202}\right)}$$

$$nf = \frac{368}{1 + 1.821782}$$

$$nf = \frac{368}{2.821782} = 130.4 \cong 131$$

$$nf = 131$$

10% (14) was added to cater for the non-response rate. The total number of participants in the exit survey was 145.

3.7 Sampling Procedure

Different probability sampling approaches were used in the study, and each woman who was of reproductive age had an equal chance of taking part. The number of women sampled for the study was 145. Five carefully selected key informants were used in the study. The key informants were purposefully selected from the mother and child clinic's three nurses and two clinical officers, all of whom were actively involved in patient care and could offer in-depth knowledge of FP Services.

3.8 Data Collection Methods

3.8.1 Questionnaire

A semi-structured questionnaire with four parts was used to gather quantitative data; part a contained information on demographic characteristics, part B contained social and economic factors, and part C contained factors related to health facilities that affected the uptake of FP services. There were both open-ended and closed-ended versions of the questions. The researcher personally administered the questionnaire to illiterate respondents and literate respondents the questions were asked in Dholuo (verbal) and Kiswahili to facilitate the respondents' understanding.

3.8.2 Focus Group Discussions

Focus group discussions (FGDs) were also held, primarily to address gaps in the quantitative data and further investigate the reasons for women's non-use or discontinuance of contraceptive use (Appendix III).

3.8.3 Key Informant Interview

Appendix VIII, a Key Informant (KI) interview guide, was developed and utilized to gather qualitative data through in-depth interviews. The instrument included inquiries about aspects of the health system and how they are perceived to connect with the use of FP services.

3.8 Validity and Reliability of the Tools

The questionnaire underwent a pretest study to ensure its validity. The researcher consulted with colleagues, research assistants, and research supervisors in the Department of health sciences to determine the validity of the research instrument. These people assessed the instrument's face validity, or how well it seems to measure the things it is supposed to measure. These people's input was used to improve the research instruments' validity by making the necessary revisions and modifications.

The data tools were tested in a pilot study at the Royal Hospital in Rongo Sub-County. This location was picked because it resembles the actual study site. 12 respondents were initially given the questionnaire. Cronbach's alpha was used to determine reliability, and a value of over 0.7 was regarded as reliable. The instrument

was improved using feedback and suggestions from the pretesting. Uncertain questions were rephrased to make them clearer. The actual study did not contain the pretest data.

3.10 Data Collection Procedure

The participant's consent to participate was obtained after the researcher had informed them of the study's necessity. The survey forms were filled out by those who gave their consent. 5 carefully chosen key informants 3 nurses and 2 clinical officers helped the researcher conduct all the interviews. These research assistants had received instruction in data collection.

3.10.1 Quantitative Data Collection

The research assistants distributed the questionnaires at the maternal clinic section of the Rongo Sub-County hospital. The participants were informed about the study and asked to consent to participate. Those who consented completed the questionnaires. The data collection instrument included sections for demographic characteristics, personal factors, and program factors. The researcher supervised the study, and at the end of each day in the field, the research team met for briefings to discuss their experiences. Quantitative data were collected from March 1, 2021, to May 30, 2021.

3.10.2 Qualitative Data Collection

Key informants included 5 medical staff members from the hospital in Rongo Sub-County. They represented various age demographics and professional backgrounds. 24 women who were looking for family planning services took part in the FGDs. Each group consisted of six people.

FGDs were held in the corresponding medical facilities' closed meeting rooms. In order to preserve anonymity and minimize bias, only the moderator and two research assistants, one of whom was taking notes, were present during the FGDs. The moderator began by introducing the research team to the participants and outlining the goal of the focus group discussion. The research assistants already had a working relationship with the research team and were aware of the motivations behind the

study. It took 40 to 45 minutes to finish the FGDs. Field notes were manually transcribed after FGD were audio captured.

3.11 Data Analysis and Management

3.11.1 Quantitative

The data was stored on a password-protected computer and backed up on Google Drive and hard drives to prevent illegal access and prevent data loss. Coding, input, data cleaning, and analysis of the gathered data were done using SPSS version 23. Using frequency tables for categorical variables and descriptive statistics for continuous variables, summarized statistics were created for the variables. Bivariate analysis was applied to establish a link between the independent and dependent variables. Odds ratios (OR) with 95% confidence intervals (CI) were computed to determine the strength of the link. The threshold for statistical significance for all analyses was a p-value of 0.05 or less. It was computed to calculate odds ratios and chi-square association testing. The correlation between the independent factors and the significant dependent variable

3.11.2 Qualitative

Questions from focus group discussions and key informant interviews received a variety of responses. This vast amount of raw data was systematically organized by the researcher to allow for suitable and sufficient analysis. After the data was reviewed, themes (those that recurred frequently) were found. It was crucial to employ thematic analysis methodology because the study questions were primarily concerned with learning about people's experiences, viewpoints, and opinions. To lessen the quantity of raw data, verbal and behavioural data was collected, categorized, summarized, and tabulated into themes. After then, themes were developed and classified to obtain meaningful knowledge logically.

3.12 Ethical Considerations

Permission to collect data was obtained from the Board of Post-Graduate Studies (Appendix IV) and ethical approval from the Jaramogi Oginga Odinga University and Technology Ethics Review Committee (Appendix V). The Kenyan National Council

for Science and Technology (Appendix VI) approved the study to be conducted, whereas permission to conduct the study was obtained from the Migori County Commissioner, County Director of Health and Sanitation. Prior to their participation, the researchers also obtained written informed consent from the respondents. Furthermore, the respondents were instructed on the methods used in the study as well as its objectives, and they were assured of absolute confidentiality.

CHAPTER FOUR: RESULTS

4.0 Introduction

This chapter presents the study findings. It begins with a presentation of the qualitative data, and questionnaire response rate, followed by presentations of the demographic characteristics of the respondents. It then presents the study results as per the study objectives. Finally, the results of the analyzed data were displayed in tables.

4.1 Demographic Characteristics of the Respondents

The majority of the study's participants, 42.8% of whom were women, were between the ages of 25 and 34 years. Protestantism predominates in the region as well, with 51.7% of the women identifying as such. In the Rongo Sub-county, 48.3% of the women had between 2 and 5 children, which was the most common child parity. Women who made less than Ksh 10,000 made up 61.4% of the population, which is the majority. According to marital status, the majority of women were single, as shown in Table 4.1.

Table 4. 1; *Demographic Characteristics of the Respondents*

Variable		Frequency (n)	Per cent (%)
Age years	18-24 Years	23	15.9
	25-34 Years	62	42.8
	35-44 Years	41	28.3
	45-49 Years	19	13.1
	Total	145	100.0
Marital Status	Married monogamous	50	34.5
	Married polygamous	28	19.3
	Single	41	28.3
	Separated	12	8.3
	Widowed	10	6.9
	Divorced	4	2.8
	Total	145	
Parity	<2	42	29.0
	2-5	70	48.3
	>5	33	22.8
	Total	145	100.0
Religion	Catholic	48	33.1
	Protestant	75	51.7
	Muslims	11	7.6
	Others	11	7.6
	Total	145	100.0
Occupation	Farmer	15	10.3
	Housewife	69	47.6
	Business lady	40	27.6
	Employed	21	14.5
	Total	145	100.0
Level of Income	0 Ksh	7	4.8
	<10,000 Ksh	89	61.4
	11,000-20,000 Ksh	31	21.4
	21,000-40,000	8	5.5
	>40,000 Ksh	10	6.9
	Total	145	100.0

4.2 Qualitative Data of Respondents

The participants of the KII comprised healthcare workers at the hospital in Rongo Sub-County. In total, 5 healthcare workers participated. The worker's ages and professional backgrounds ranged widely. The youngest employee was 24 years old and had 2 years of experience, and the oldest employee was over 50 years old and had over 25 years of experience.

Table 4. 2*: Summary of Key Informant and Focus Groups participants*

Key informant interviews professional cadre	Male	Female	Total
Nurses	1	2	3
Clinic officers	1	1	2
Total Participants	2	3	5

A subgroup of women seeking family planning services who had also taken part in the quantitative study was the subject of the focus group discussions (FGDs). In total 6 women from each group made up the 24 total participants in the FGDs. The four themes in the FGD interview guide were.

Table 4. 3: *Summary of Focus Group Discussion Participants*

Age in years	1st group	2nd group	3rd group	4th group	Total
18-24	0	1	1	1	3
25-29	1	1	2	0	4
30-34	2	1	1	1	5
35-39	1	1	1	1	4
40-44	1	1	0	1	5
45-49	1	1	1	2	5
Total	6	6	6	6	24

Table 4. 4: *Themes from KIIs and FGDs.*

Themes	Categories	Code
1. Knowledge on FP	General knowledge of FP Applied Knowledge of FP	New concept Personal experience General Knowledge Misconceptions on FP
2. Perception of FP	Impression on the process	Length Content
3. Challenges	Societal barriers Usefulness	The most useful/impressive aspect Misconceptions Social disparity
4. Suggestions	Personal fear Process of counselling and administering FP Sustainability	Personal fear Length of the hospital visit FP delivery Opportunities for peer teaching/learning Involving other stakeholders Continuity

4.3 Uptake of family planning services Among Women

Uptake of family planning services stood at 68.3 percent (99) among the women in Rongo Sub-count. In terms of religion, 37.2 % (54/145) of the respondents who used family planning were Protestants. Based on marital status, 34.5 % (50) of the women were housewives who used more family planning services. Uptake of family planning was common among women who earned less than Ksh 10,000, 41.4 %(60) as shown in Table 4.5.

Table 4. 5: *Uptake of Family Planning Services*

		Currently using any FP		Total
		Yes; n (%)	No; n (%)	
Age of respondent	18-24 Years	15(10.3)	8(5.5)	23(15.9)
	25-34 Years	40(27.6)	22(15.2)	62(42.8)
	35-44 Years	30(20.7)	11(7.6)	41(28.3)
	44-49 Years	14(9.7)	5(3.4)	19(13.1)
Marital status	Married monogamous	35(24.1)	15(10.3)	50(34.5)
	Married polygamous	19(13.1)	9(6.2)	28(19.3)
	Single	29(20.0)	12(8.3)	41(28.3)
	Separated	9(6.2)	3(2.1)	12(8.3)
	Widowed	5(3.4)	5(3.4)	10(6.9)
	Divorced	2(1.4)	2(1.4)	4(2.8)
Education of respondent	Primary	45(31.0)	15(10.3)	60(41.4)
	Secondary	29(20.0)	10(6.9)	39(26.9)
	College	16(11.0)	14(9.7)	30(20.7)
	University	9(6.2)	7(4.8)	16(11.0)
Religion of respondent	Catholic	31(21.4)	17(11.7)	48(33.1)
	Protestant	54(37.2)	21(14.5)	75(51.7)
	Muslim	8(5.5)	3(2.1)	11(7.6)
	Others	6(4.1)	5(3.4)	11(7.6)
Occupation of respondent	Farmer	11(7.6)	4(2.8)	15(10.3)
	Housewife	50(34.5)	19(13.1)	69(47.6)
	Business lady	27(18.6)	13(9.0)	40(27.6)
	Employed	11(7.6)	10(6.9)	21(14.5)
Number of living children	<2	28(19.3)	14(9.7)	42(29.0)
	2-5	46(31.7)	24(16.6)	70(48.3)
	>5	25(17.2)	8(5.5)	33(22.8)
Household Monthly income	Ks 0	4(2.8)	3(2.1)	7(4.8)
	< Ksh10, 000	60(41.4)	29(20.0)	89(61.4)
	Ksh 11, 000-Ksh 20, 000	23(15.9)	8(5.5)	31(21.4)
	Ksh 21, 000-Ksh 40, 000"	5(3.4)	3(2.1)	8(5.5)
	>Ksh 40, 000"	7(4.8)	3(2.1)	10(6.9)
	Total	99(68.3)	46(31.7)	145(100.0)

The study found that lack of support from partners who have a negative attitude and hold specific misunderstandings about family planning birth control techniques is another reason why few women in low-income families take contraceptives.
The study found that lack of support from partners who have a negative attitude and hold specific cultural beliefs and misunderstandings about family planning services is another reason why few women in low-income families take contraceptives: When asked during a Focused group discussion, one of the respondents said,

"Most men beat up their wives when they learn that they have taken a contraceptive. Some men marry more wives as a punishment after their spouses have used a contraceptive method. Most men just don't approve of the use (HCP 1)."

"There are bad rumours and myths about FP services making clients discontinue FP services, and others negatively discourage the potential clients. We need frequent sensitization campaigns in the community to target myths and misconceptions that discourage FP services, especially with the help of community health extension workers (HCP 2)."

4.6 Social Economic Factors that Influence the Uptake of Family Planning Services.

According to the results, religion significantly affects how frequently residents of the Rongo sub-county use family planning services. The likelihood of Muslim women using family planning services is 1.74 times less likely than that of Christian women (AOR=-1.74, p-value=0.051, 95% CL -0.996 - 32.696). In a similar vein, cultural perspectives play a significant role in whether or not people use family planning services. In the Rongo sub-county, women who adhere to cultural traditions are 0.55 times less likely to use family planning services (AOR=.55, p-value=0.036, 95% CL -0.107 - 20.043). This finding is in line with other findings in Table 4.6.

Table 4. 6: *Social Economic Factors Influencing Uptake of Family Planning Services*

		Adj. Odds	S.E.	df	Sig.	Unadjusted Odds	95% C.I for Odd	
							Lower	Upper
Education	Primary			3	.112			
	Secondary	1.020	.806	1	.206	2.772	.571	13.458
	College	.490	.841	1	.560	1.633	.314	8.481
	University	-.645	.870	1	.459	.525	-.095	2.889
Religion	Catholic			3	.224			
	Protestant	.971	.906	1	.283	2.642	.448	15.591
	Muslim	-1.742	.891	1	.051	5.707	-1.996	32.696
	Others	1.275	1.140	1	.263	3.580	.383	33.428
Household	No income			4	.240			
income	Less than Ksh 10, 000	-.871	2.256	1	.699	.419	.005	34.814
	Ksh 11,000 - 20, 000	.448	1.958	1	.819	1.564	.034	72.553
	Ksh 21,000 - 40, 000	1.912	1.939	1	.324	6.765	.151	302.74
	Above Ksh 40, 0000	2.713	1.747	1	.120	15.070	.491	462.39
Income of	No income			4	.575			
spouse	Less than Ksh 10, 000	.379	1.959	1	.847	1.460	.031	67.884
	Ksh 11,000-20, 000	-.130	1.860	1	.944	.878	.023	33.632
	Ksh 21,000-40, 000	-1.662	2.008	1	.408	.190	.004	9.720
	Above Ksh 40, 0000	-1.721	1.700	1	.311	.179	.006	5.001
Obstacles	Religious beliefs			3	.089			
	Resistance from partner	.681	.776	1	.380	1.977	.432	9.048
	Cultural beliefs	-.550	.739	1	.036	0.710	-.107	20.043
	Fear installed by other people	-.031	.816	1	.970	.970	-.196	4.800
	Constant	-1.757	1.632	1	.282	.173		

FGD guide findings also revealed clients were shunning the FP services because of perceived rumours which had created anxiety and fear even among those using the FP services while those not on it, refuse to take the FP services even after counselling.

The FGDs guide findings also revealed religion has a significant influence on the uptake of family planning services as explained by one participant,

"Even the church says we should not use contraceptives, so you fear that God will punish you if you use". (Participant I).

4.7 Health Facility Factors that Influence the Uptake of Family Planning Services.

Binomial regression was used in the study to identify the health facility characteristics associated with the use of family planning services in Rongo Sub County. The method of contraception, the medical facility, and the cost all have a significant impact on how frequently family planning services are used in Rongo Sub County. Women are 1.689 times more likely to use hormonal contraceptives than condoms (adj. odds=1.689, p-value=0.033, 95% CL 1.15 - 25.486). Women are also 2.26 times less likely to use family planning services from locations without access to licensed healthcare professionals (adj. odds=-2.256, p-value=0.014, 95% CL -0.591 - 7.299). Table 4.7 shows that women are significantly less likely than men to use family planning services from expensive medical facilities.

Table 4. 7: *Health Facility Factors Influencing the Uptake of Family Planning Services.*

		Adj. Odds	S.E.	df	Sig.	Unadjusted Odds	95% C.I for Odds	
							Lower	Upper
Method	Service providers help	-.745	.502	1	.138	.475	.177	1.271
	Barrier eg condom			2	.083			
	Hormonal eg pill	1.689	.790	1	.033	5.413	1.150	25.486
	Surgical eg tubal ligation	.731	.656	1	.265	2.078	.575	7.516
Availability	Always available			2	.872			
	Not always available	-21.220	40193.3	1	1.000	.000	.000	.
	Unavailable	-21.573	40193.3	1	1.000	.000	.000	.
Cost	Very affordable			2	.010			
	Affordable	-2.234	.747	1	.003	.107	-3.02	.463
	Unaffordable	-1.257	.599	1	.036	.285	.088	.920
Challenges	No supplier			2	.005			
	No health provider	-2.256	.914	1	.014	.547	-.591	7.299
	Expensive services	-1.310	.472	1	.005	.707	-.470	9.349
Source of FP	The preferred source of FP	-.238	.546	1	.663	.788	.270	2.298
Distance	Not very far			2	.879			
	Far	-.070	.587	1	.906	.933	.295	2.947
	Very far	.205	.500	1	.682	1.227	.461	3.270
Information	Hospital			3	.702			
	Mass media	-.212	.792	1	.789	.809	.171	3.819
	NGO	-.092	.545	1	.866	.912	.313	2.656
	Friends	.530	.640	1	.407	1.699	.485	5.950
	Constant	21.820	4019	1	1.000	2994		

Key Informant Interviews guide findings also revealed that health care providers had experienced problems with a regular supply of supplies of family planning services. To further explore the availability of FP services, Key Informant Interviews were held with healthcare providers who work at the FP unit, whereby a theme of irregular supply of FP supplies emerged, where it was realized that mothers were unable to get FP services in this facility. A provider stated that:

"We are experiencing problems with a regular supply of supplies for FP; when we lack the necessary supplies, and a client comes, we tell them to go and come back later or seek the same service in the private facilities. Most of them give up and fail to return (HCP 3)."

CHAPTER FIVE: DISCUSSIONS

5.0 Introduction

This chapter shows the findings of the study and how the results link with other studies based on the following themes: prevalence of uptake of family planning services, social economic and health facility factors influencing uptake of family planning services.

5.1 Uptake of Family Planning Services

A total of 68.3 percent of women in Rongo Sub-county used family planning services, with Christian women using these services at the highest rates. The adoption rate just barely beat the 60.3% county average. (KDHS, 2022). Women between the ages of 25 and 34 showed a higher predisposition for using family planning services when other age groups were taken into account, it was discovered. This tendency is not observed in Nairobi County, where Thiong'o et al. (2022) discovered that women between the ages of 35 and 39 demonstrated a stronger desire for family planning services.

The relatively higher fertility rates in the 25–40 years age group can be blamed for this variation. The research also showed that most women preferred hormonal methods over barrier methods. This preference stood out in particular among married women who had issues with their spouses using barrier methods. As a result, they chose hormonal treatments to keep their marriages harmonious. These results are consistent with the study by Mahoro (2023), which concluded that injectables were the most widely used method of family planning. In Rongo Sub-county, women who had at least two live births made up a sizable portion of those who used family planning services. Due to the rising costs of raising children, there is a decreased desire for more children, which increases the motivation for using family planning services.

5.2 Social - Economic Factors that Influence the Uptake of Family Planning Services

The results show that the Rongo sub-use county's family planning services were significantly influenced by religion. The adoption of family planning services was

significantly influenced favourably by Islamic cultural norms and beliefs, with women of Islamic faith being more likely to use these services than their Christian counterparts. Since women who were deeply ingrained in cultural traditions were less likely to use family planning services, cultural practices also had a significant impact on the uptake of these services. According to Eltomy (2013) study, 8.2% of women avoided using family planning methods because they were not accepted by their cultures and religions. Successful programs must take into account and respect these factors because of the significant influence that culture and religion have on our society.

The study also shows that clients seeking family planning services are discouraged by the high cost of contraceptives. Economically disadvantaged women in Rongo Sub-County find it difficult to use expensive contraceptives because of their precarious financial situations, which are frequently caused by job loss. Accordingly, the study claims that the price of contraceptives significantly inhibits people from using them. Similar findings by Omwago et al. (2016) show that the price of contraception, particularly in low-income countries, can be prohibitive for many women, and that the few contraceptive options available can affect overall costs. 97% of participants in an African study said they wouldn't buy contraceptives if they had to pay the full cost (Mawajdeh, 2019). The misunderstanding of the false belief that contraceptives are prohibitively expensive may prevent long-term use. Due to rising prices at retailers like pharmacies and chemists, some women have even reported quitting using contraceptives, especially in Nigeria where the intrauterine device (IUD) is regarded as the priciest option.

The distances needed to travel to the nearest medical facility are another significant barrier for women living in rural areas (EDHS, 2017). For women in rural areas, this geographic barrier is a significant barrier to accessing family planning services.

When it comes to obtaining and using contraception, low-income women frequently encounter financial obstacles (Campbell et al., 2018). According to the study's findings, families with lower incomes have higher fertility rates than families with

higher incomes. According to findings from focus group discussions (FGDs) and key informant interviews, many low-income earners want larger families because they see children as a gift from God. The belief that having more children can help relieve some of the household responsibilities may be the root of this preference for larger families. In addition, Ocholla-Ayayo (2017) emphasized the connection between high fertility rates and poverty, showing that low-income families bear a heavier burden of dependency and have a higher dependency ratio. Between 35% and 40% of women in a study on healthcare costs in Nigeria, Ghana, and Kenya said they had financial difficulties getting medical care (Asante *et al.*, 2016).

Healthcare costs are likely to increase even more during pandemics. For instance, a study done in Liberia during an outbreak found that 83.8% of the people surveyed reported having to pay significantly more for healthcare than usual (Albert, 2020). For women living in low-income environments, these financial burdens can present significant obstacles, making contraception and other healthcare services less available and affordable.

5.3 Health Facility Factors Influencing Uptake of Family Planning Services.

The study conducted in Rongo Sub-County revealed that various factors related to health facilities influence the uptake of family planning services. These factors include the type of contraception method, the healthcare provider, and the cost of the services. In this particular setting, women are more inclined to use hormonal contraceptives rather than barrier methods like condoms. Oral pills are the most commonly used contraceptive method due to their affordability, availability, and the fact that they do not necessarily require specialized providers.

The presence or absence of healthcare providers has a significant impact on women's utilization of family planning services. When there are no healthcare providers available, the uptake of methods such as tubal ligation, which requires skilled personnel, decreases. The role of healthcare providers in promoting healthcare services cannot be underestimated, as they play a crucial role in influencing women's decisions and choices regarding healthcare. Barber (2017) highlights the importance

of the quality of services provided, demonstrating that women are more likely to use contraceptives when they have a positive impression of the care they receive. Effective communication between healthcare providers and patients, including regular, friendly, and confidential discussions about family planning options, is associated with increased use of postpartum contraceptives.

Women's decisions regarding contraceptive use, non-use, or discontinuation are influenced by various factors. These include perceived risks and benefits, concerns about the impact of side effects on daily life, and considerations of how specific methods may affect their relationships with partners or other family members (Odwe *et al.*, 2021).

CHAPTER SIX:
CONCLUSION AND RECOMMENDATIONS

6.0 Introduction

This chapter concludes with recommendations on how to address the prevalence, socioeconomic factors, and healthcare providers linked to family planning service use to support healthy reproductive practices.

6.1 Conclusions

The use of family planning services is a crucial component of interventions for maternal, fetal, and child health. This is due to its many advantages in terms of minimizing maternal death, lowering neonatal and infant mortality, and promoting socioeconomic sustainability. In the Rongo Sub-County, this study aimed to identify the factors associated with the uptake of family planning services by women attending the maternal clinic at Rongo Sub-County Hospital. The main factors associated with the uptake of family planning were identified as socio-demographic, socio-economic, and health facility characteristics.

The uptake of family planning services was correlated with a woman's age and educational level. Because they can read and comprehend crucial statements about use and adverse effects and make educated decisions, this may be related to access to information on contraceptives. In general, the respondents had a good level of understanding about family planning techniques. The lack of use was caused by additional reasons like method failure and side effect fear.

The uptake of family planning services was hindered by religion as well as other cultural factors such as fertility aspirations, myths and misconceptions, marriage roles, and husband/partner approval. It is crucial to recognize that men not only influence decisions about using FP services directly, but also indirectly by predominating in women's economic, social, and family requirements. Furthermore, it has been shown that women use family planning services at a considerably higher rate when their income is higher. When they are supported by their spouses and the community, women are more likely to use family planning services.

The availability of adequate information supplied by Community Health workers (CHWs) and other health staff, along with factors related to the health facility such as the free provision of FP services, improved the use of PF services. However frequent stockouts, anxiety about side effects and health issues, a lack of privacy at the facility, and roughness or a negative attitude among the health staff discouraged the use of FP services and thus increased cessation rates. Despite women selecting and stating their preference for family planning services methods, it was seen that these women were not utilizing the method they had selected, reflecting significant gaps in FP services counselling. The media and healthcare professionals were cited as common sources of knowledge on FP services.

6.2 Recommendations

From the results, it can be recommended that;

1. Policies should be created to support education, particularly among women, to enable them to educate and empower the general public by setting an example for limited family size. Women who are educated have better access to information and economic position, which allows them to make wise judgments about using contraceptives.
2. Community health workers should create awareness about information on family planning services and how to deal with adverse effects. There is a need to target women who still want to space out their children with health messages aimed at improving family planning services uptake. This will allow them to seek answers when they hear cultural beliefs and misconceptions.
3. To ensure that the services provided at the facility are of the highest calibre and to strengthen the contraceptive counselling by healthcare professionals, it is necessary to address issues with the health facility, such as the lack of FP infrastructure and the staffing shortage. The government needs to develop policies to expand the role of CHWs in the delivery of PF services counselling, hormonal contraceptives like pills and Depo Provera, and training for all health workers to address health facility factors.

6.3 Future Research

1. Because this study was only conducted on a small scale in one Sub-County, a wider inquiry cross-section study between Mombasa County and Migori County is required to determine whether the findings of this study apply to the full counties.
2. More research is needed to find out how these myths and Islamic religious beliefs are spread to develop strategies to discourage the uptake of family planning services. According to the results of this study, myths and misconceptions as well as Islamic religious beliefs had a significant impact on the uptake of family planning services.

REFERENCES

Adefalu, A. A., Ladipo, O. A., Akinyemi, O. O., Popoola, O. A., Latunji, O. O., & Iyanda, O. (2019). Qualitative Exploration of factors affecting Uptake and Demand for Contraception and other Family Planning Services in North-West Nigeria. *Afr J Reprod Health*, *23*(4), 63-74. https://doi.org/10.29063/ajrh2019/v23i4.8

Adkoli, A., Kumar, S., Futterman, I. D., & Clare, C. A. (2022). Access to Family Planning Services Following Natural Disasters and Pandemics: A Review of the English Literature. *Cureus*, *14*(7), e26926. https://doi.org/10.7759/cureus.26926

Akamike, I. C., Okedo-Alex, I. N., Eze, II, Ezeanosike, O. B., & Uneke, C. J. (2020). Why does uptake of family planning services remain sub-optimal among Nigerian women? A systematic review of challenges and implications for policy. *Contracept Reprod Med*, *5*(1), 30. https://doi.org/10.1186/s40834-020-00133-6

Akoth, C., Oguta, J. O., & Gatimu, S. M. (2021). Prevalence and factors associated with covert contraceptive use in Kenya: a cross-sectional study. *BMC Public Health*, *21*(1), 1316. https://doi.org/10.1186/s12889-021-11375-7

Amo-Adjei, J., Mutua, M., Athero, S., Izugbara, C., & Ezeh, A. (2017). Improving family planning services delivery and uptake: experiences from the "Reversing the Stall in Fertility Decline in Western Kenya Project". *BMC Res Notes*, *10*(1), 498. https://doi.org/10.1186/s13104-017-2821-4

Atuhairwe, S., Hanson, C., Tumwesigye, N. M., Gemzell-Danielsson, K., & Byamugisha, J. (2023). Second trimester post-abortion family planning uptake and associated factors in 14 public health facilities in Central Uganda: a cross-sectional study. *Contracept Reprod Med*, *8*(1), 4. https://doi.org/10.1186/s40834-022-00199-4

Baruwa, S., Tobey, E., Okafor, E., Afolabi, K., Akomolafe, T. O., Ubuane, I., Anyanti, J., & Jain, A. (2022). The role of job aids in supporting task sharing family planning services to community pharmacists and patent proprietary medicine vendors in Kaduna and Lagos, Nigeria. *BMC Health Serv Res*, *22*(1), 981. https://doi.org/10.1186/s12913-022-08360-0

Bisset, M., Brown, L. E., Bhide, S., Patel, P., Zendarski, N., Coghill, D., Payne, L., Bellgrove, M. A., Middeldorp, C. M., & Sciberras, E. (2023). Practitioner Review: It's time to bridge the gap - understanding the unmet needs of consumers with attention-deficit/hyperactivity disorder - a systematic review and recommendations. *J Child Psychol Psychiatry*. https://doi.org/10.1111/jcpp.13752

Britton, L. E., Tumlinson, K., Williams, C. R., Wambua, D., Onyango, D., Mantell, E., & George, M. (2022). Findings from a mixed-methods journey map study of barriers to family planning in western Kenya. *Health Care Women Int*, 1-17. https://doi.org/10.1080/07399332.2022.2135097

Chace Dwyer, S., Jain, A., Baruwa, S., Okafor, E., Babajide Oluseyi, D., & Ubuane, O. (2021). How do fertility intentions lead to contraceptive continuation among a cohort of family planning users who received services from the private sector in Nigeria. *Gates Open Res*, *5*, 103. https://doi.org/10.12688/gatesopenres.13253.2

Chen, Y., Begnel, E., Muthigani, W., Achwoka, D., McGrath, C. J., Singa, B., Gondi, J., Ng'ang'a, L., Langat, A., John-Stewart, G., Kinuthia, J., & Drake, A. L. (2020). Higher contraceptive uptake in HIV treatment centers offering integrated family planning services: A national survey in Kenya. *Contraception*, *102*(1), 39-45. https://doi.org/10.1016/j.contraception.2020.04.003

Choge, M., Ngure, K., Echoka, E., & Abuya, T. (2021). A comparative analysis of the availability of family planning services in the social franchise and non-franchise private health facilities in Kajiado County, Kenya. *Pan Afr Med J*, *38*, 380. https://doi.org/10.11604/pamj.2021.38.380.24055

Dettinger, J. C., Pintye, J., Dollah, A., Awuor, M., Abuna, F., Lagat, H., Kohler, P., John-Stewart, G., O'Malley, G., Kinuthia, J., & Beima-Sofie, K. (2021). Brief Report: "What Is This PrEP?"-Sources and Accuracy of HIV Pre-Exposure Prophylaxis (PrEP) Awareness Among Adolescent Girls and Young Women Attending Family Planning and Maternal Child Health Clinics in Western Kenya. *J Acquir Immune Defic Syndr*, *88*(4), 356-360. https://doi.org/10.1097/QAI.0000000000002782

Dev, R., Kohler, P., Begnel, E., Achwoka, D., McGrath, C. J., Pintye, J., Muthigani, W., Singa, B., Gondi, J., Ng'ang'a, L., Langat, A., John-Stewart, G., Kinuthia, J., & Drake, A. L. (2021). Contraceptive counseling experiences among women attending HIV care and treatment centers: A national survey in Kenya. *Contraception*, *104*(2), 139-146. https://doi.org/10.1016/j.contraception.2021.04.011

Dulli, L., Field, S., Masaba, R., & Ndiritu, J. (2019). Addressing broader reproductive health needs of female sex workers through integrated family planning/ HIV prevention services: A non-randomized trial of a health-services intervention designed to improve uptake of family planning services in Kenya. *PLoS One*, *14*(7), e0219813. https://doi.org/10.1371/journal.pone.0219813

Eastment, M. C., Wanje, G., Richardson, B. A., Mwaringa, E., Patta, S., Sherr, K., Barnabas, R. V., Mandaliya, K., Jaoko, W., & McClelland, R. S. (2022). A cross-sectional study of the prevalence, barriers, and facilitators of cervical cancer screening in family planning clinics in Mombasa County, Kenya. *BMC Health Serv Res*, *22*(1), 1577. https://doi.org/10.1186/s12913-022-08984-2

Fotso, J. C., Cleland, J. G., Kouo Ngamby, M., Lukong Baye, M., & Adje, E. O. (2023). Pregnancy risks and contraceptive use among postpartum mothers in Cameroon: implications for improving the coverage of postpartum family planning services. *Reprod Health*, *20*(1), 2. https://doi.org/10.1186/s12978-022-01552-1

Githinji, F., Maru, S. M., Karimi, P. N., Rutungwa, E., & Kayitare, E. (2022). Factors affecting provision of female family planning commodities in public health facilities in Kajiado county, Kenya. *J Pharm Policy Pract*, *15*(1), 91. https://doi.org/10.1186/s40545-022-00488-y

Gotsche, C. I., Steyn, P. S., Narasimhan, M., Rodolph, M., Baggaley, R., & Kiarie, J. N. (2022). Integrating pre-exposure prophylaxis of HIV infection into family planning services: a scoping review. *BMJ Sex Reprod Health*. https://doi.org/10.1136/bmjsrh-2021-201356

Grossman, D., Onono, M., Newmann, S. J., Blat, C., Bukusi, E. A., Shade, S. B., Steinfeld, R. L., & Cohen, C. R. (2013). Integration of family planning

services into HIV care and treatment in Kenya: a cluster-randomized trial. *AIDS*, *27 Suppl 1*, S77-85. https://doi.org/10.1097/QAD.0000000000000035

Hakim, A. J., Ogwal, M., Doshi, R. H., Kiyingi, H., Sande, E., Serwadda, D., Musinguzi, G., Standish, J., & Hladik, W. (2022). At the intersection of sexual and reproductive health and HIV services: use of moderately effective family planning among female sex workers in Kampala, Uganda. *BMC Pregnancy Childbirth*, *22*(1), 646. https://doi.org/10.1186/s12884-022-04977-5

Hamon, J. K., Kambanje, M., Pryor, S., Kaponda, A. S., Mwale, E., Mayhew, S. H., Webster, J., & Burchett, H. E. D. (2022). Integrated delivery of family planning and childhood immunization services: a qualitative study of factors influencing service responsiveness in Malawi. *Health Policy Plan*, *37*(7), 885-894. https://doi.org/10.1093/heapol/czac048

Harrington, E. K., Newmann, S. J., Onono, M., Schwartz, K. D., Bukusi, E. A., Cohen, C. R., & Grossman, D. (2012). Fertility intentions and interest in integrated family planning services among women living with HIV in Nyanza Province, Kenya: a qualitative study. *Infect Dis Obstet Gynecol*, *2012*, 809682. https://doi.org/10.1155/2012/809682

Hemono, R., Packel, L., Gatare, E., Baringer, L., Ippoliti, N., McCoy, S. I., & Hope, R. (2022). Digital self-care for improved access to family planning and reproductive health services among adolescents in Rwanda: preliminary findings from a pilot study of CyberRwanda. *Sex Reprod Health Matters*, *29*(3), 2110671. https://doi.org/10.1080/26410397.2022.2110671

Kenny, L., Lokot, M., Bhatia, A., Hassan, R., Pyror, S., Dagadu, N. A., Aden, A., Shariff, A., Bacchus, L. J., Hossain, M., & Cislaghi, B. (2022). Gender norms and family planning amongst pastoralists in Kenya: a qualitative study in Wajir and Mandera. *Sex Reprod Health Matters*, *30*(1), 2135736. https://doi.org/10.1080/26410397.2022.2135736

Kirui, E. K., Mung'atu, J. K., Gichangi, P., Onguto, N. O., & Kamondo, D. K. (2021). Multiple Logistic Regression Model for Determinants of Injectable Contraceptive Uptake Among Women of Reproductive Age in Kenya. *J Family Reprod Health*, *15*(2), 82-90. https://doi.org/10.18502/jfrh.v15i2.6448

Kungu, W., Agwanda, A., & Khasakhala, A. (2022). Prevalence of and factors associated with contraceptive discontinuation in Kenya. *Afr J Prim Health Care Fam Med*, *14*(1), e1-e11. https://doi.org/10.4102/phcfm.v14i1.2992

Lahiri, S., Bingenheimer, J., Sedlander, E., Munar, W., & Rimal, R. (2023). The role of social norms on adolescent family planning in rural Kilifi county, Kenya. *PLoS One*, *18*(2), e0275824. https://doi.org/10.1371/journal.pone.0275824

Long, J. E., Eastment, M. C., Wanje, G., Richardson, B. A., Mwaringa, E., Mohamed, M. A., Sherr, K., Barnabas, R. V., Mandaliya, K., Jaoko, W., & McClelland, R. S. (2022). Assessing the sustainability of the Systems Analysis and Improvement Approach to increase HIV testing in family planning clinics in Mombasa, Kenya: results of a cluster randomized trial. *Implement Sci*, *17*(1), 70. https://doi.org/10.1186/s13012-022-01242-3

Moon, T. D., Okoth, V., Starnes, J. R., Opiyo, E., Ressler, D. J., Mbeya, J., & Rogers, A. (2021). Determinants of modern contraceptive prevalence and unplanned pregnancies in Migori County, Kenya: results of a cross-sectional household survey. *Afr J Reprod Health*, *25*(1), 29-40. https://doi.org/10.29063/ajrh2021/v25i1.4

Moray, K. V., Joshi, B., Sachin, O., & Chaurasia, H. (2022). Cost of providing family planning services & management of pregnancy outcomes at public health facilities in India. *Indian J Med Res*, *155*(1), 34-42. https://doi.org/10.4103/ijmr.IJMR_146_20

Msovela, J., Tengia-Kessy, A., & Mubyazi, G. M. (2022). Health Facility Readiness for Promoting Male Involvement in Family Planning Services in Tanzania: A Qualitative Study on Perspectives of Health Providers in Kibaha District. *East Afr Health Res J*, *6*(1), 22-31. https://doi.org/10.24248/eahrj.v6i1.675

Mugwanya, K. K., Matemo, D., Scoville, C. W., Beima-Sofie, K. M., Meisner, A., Onyango, D., Mugambi, M., Feutz, E., Grabow, C., Barnabas, R., Weiner, B., Baeten, J. M., Kinuthia, J., & Team, F. P. P. (2021). Integrating PrEP delivery in public health family planning clinics: a protocol for a pragmatic stepped wedge cluster randomized trial in Kenya. *Implement Sci Commun*, *2*(1), 135. https://doi.org/10.1186/s43058-021-00228-4

Obat, E., Schaefer, K., Opiyo, M., Otieno, G., Windindi, H., Omuodo, D., & Mehta, S. D. (2021). Identifying Client Targets for Improved Mobilization and Uptake of Integrated Family Planning and Reproductive Health in Environmental Programs in Kenya. *Front Glob Womens Health*, *2*, 559297. https://doi.org/10.3389/fgwh.2021.559297

Odwe, G., Wado, Y. D., Obare, F., Machiyama, K., & Cleland, J. (2021). Method-specific beliefs and subsequent contraceptive method choice: Results from a longitudinal study in urban and rural Kenya. *PLoS One*, *16*(6), e0252977. https://doi.org/10.1371/journal.pone.0252977

Ondenge, K., Gvetadze, R., Otieno, G., Gust, D. A., & McLellan-Lemal, E. (2021). Factors associated with age of first sex among women screened for an observational contraceptive vaginal ring study in Kisumu, Kenya, 2014. *Afr J Reprod Health*, *25*(1), 101-113. https://doi.org/10.29063/ajrh2021/v25i1.12

Ontiri, S., Kabue, M., Biesma, R., Stekelenburg, J., & Gichangi, P. (2021). Assessing quality of family planning counseling and its determinants in Kenya: Analysis of health facility exit interviews. *PLoS One*, *16*(9), e0256295. https://doi.org/10.1371/journal.pone.0256295

Ontiri, S., Were, V., Kabue, M., Biesma-Blanco, R., & Stekelenburg, J. (2020). Patterns and determinants of modern contraceptive discontinuation among women of reproductive age: Analysis of Kenya Demographic Health Surveys, 2003-2014. *PLoS One*, *15*(11), e0241605. https://doi.org/10.1371/journal.pone.0241605

Onyango, D. O., Tumlinson, K., Chung, S., Bullington, B. W., Gakii, C., & Senderowicz, L. (2022). Evaluating the feasibility of the Community Score Card and subsequent contraceptive behavior in Kisumu, Kenya. *BMC Public Health*, *22*(1), 1960. https://doi.org/10.1186/s12889-022-14388-y

Ormel, H., Oele, G., Kok, M., Oruko, H., Oluoch, B., Smet, E., & Indalo, D. (2021). Reducing unmet need for contraceptive services among youth in Homabay and Narok counties, Kenya: the role of community health volunteers - a qualitative study. *BMC Health Serv Res*, *21*(1), 405. https://doi.org/10.1186/s12913-021-06363-x

Owuor, H. O. (2020). Comparison of postpartum family planning uptake between primiparous and multiparous women in Webuye County Hospital, Kenya. *S Afr Fam Pract (2004)*, *62*(1), e1-e5. https://doi.org/10.4102/safp.v62i1.5093

Roche, S. D., Barnabee, G., Omollo, V., Mogaka, F., Odoyo, J., Bukusi, E. A., Morton, J. F., Johnson, R., Celum, C., Baeten, J. M., & O'Malley, G. (2022). Implementation strategies for integrating pre-exposure prophylaxis for HIV prevention and family planning services for adolescent girls and young women in Kenya: a qualitative study. *BMC Health Serv Res*, *22*(1), 422. https://doi.org/10.1186/s12913-022-07742-8

Rogers, Z., Pintye, J., Kinuthia, J., O'Malley, G., Abuna, F., Escudero, J., Mugambi, M., Awuor, M., Dollah, A., Dettinger, J. C., Kohler, P., John-Stewart, G., & Beima-Sofie, K. (2022). Key influences on the decision to initiate PrEP among adolescent girls and young women within routine maternal child health and family planning clinics in Western Kenya. *AIDS Care*, *34*(3), 363-370. https://doi.org/10.1080/09540121.2021.1981217

Sedlander, E., Bingenheimer, J. B., Lahiri, S., Thiongo, M., Gichangi, P., Munar, W., & Rimal, R. N. (2021). Does the Belief That Contraceptive Use Causes Infertility Actually Affect Use? Findings from a Social Network Study in Kenya. *Stud Fam Plann*, *52*(3), 343-359. https://doi.org/10.1111/sifp.12157

Sila, J., Larsen, A. M., Kinuthia, J., Owiti, G., Abuna, F., Kohler, P. K., John-Stewart, G., & Pintye, J. (2020). High Awareness, Yet Low Uptake, of Pre-Exposure Prophylaxis Among Adolescent Girls and Young Women Within Family Planning Clinics in Kenya. *AIDS Patient Care STDS*, *34*(8), 336-343. https://doi.org/10.1089/apc.2020.0037

Thiongo, M., Gichangi, P., Macho, P. K., Byrne, M. E., Kimani, P., Waithaka, M., Radloff, S., Anglewicz, P., & Decker, M. R. (2022). Implementation of respondent driven sampling in Nairobi, Kenya, for tracking key family planning indicators among adolescents and youth: lessons learnt. *BMC Res Notes*, *15*(1), 200. https://doi.org/10.1186/s13104-022-06038-8

Thomas, D., Wanje, G., Eastment, M. C., McClelland, R. S., Mwaringa, E., Patta, S., Jaoko, W., Kinuthia, J., Abubakar, A., Sherr, K., & Barnabas, R. V. (2022). The cost of implementing the Systems Analysis and Improvement Approach for a cluster randomized trial integrating HIV testing into family planning services in Mombasa County, Kenya. *BMC Health Serv Res*, *22*(1), 1480. https://doi.org/10.1186/s12913-022-08828-z

Tumlinson, K., Britton, L. E., Goland, E., Chung, S., Bullington, B. W., Williams, C. R., Wambua, D. M., Onyango, D. O., & Senderowicz, L. (2023). Contraceptive stockouts in Western Kenya: a mixed-methods mystery client study. *BMC Health Serv Res*, *23*(1), 74. https://doi.org/10.1186/s12913-023-09047-w

Tumlinson, K., Britton, L. E., Williams, C. R., Wambua, D. M., Onyango, D. O., & Senderowicz, L. (2022). Contraceptive method denial as downward contraceptive coercion: A mixed-methods mystery client study in Western Kenya. *Contraception*, *115*, 53-58. https://doi.org/10.1016/j.contraception.2022.06.014

Vohra-Gupta, S., Ela, E., Vizcarra, E., Petruzzi, L. J., Hopkins, K., Potter, J. E., & White, K. (2022). Evidence-based family planning services among publicly funded providers in Texas. *BMC Health Serv Res*, *22*(1), 1498. https://doi.org/10.1186/s12913-022-08889-0

Williams, C. R., Britton, L. E., Bullington, B. W., Wambua, D. M., Onyango, D. O., & Tumlinson, K. (2022). Frequency and impact of long wait times for family

planning in public-sector healthcare facilities in Western Kenya. *Glob Health Action*, *15*(1), 2128305. https://doi.org/10.1080/16549716.2022.2128305

Winston, J., Calhoun, L. M., Corroon, M., Guilkey, D., & Speizer, I. (2018). Impact of the Urban Reproductive Health Initiative on family planning uptake at facilities in Kenya, Nigeria, and Senegal. *BMC Womens Health*, *18*(1), 9. https://doi.org/10.1186/s12905-017-0504-x

APPENDICES

Appendix I: Informed Consent Form

Introduction

I'm OTIENO CHURCHILL OCHIENG, a second-year student in the School of Health at Jaramogi Oginga Odinga University of Science and Technology. To complete the Master's course, I will conduct research. In the Rongo sub-county, this study looks into the variables that influence the use of family planning services. To gain a better understanding of the current state of the field, I have been hired to conduct this survey.

AREA OF INTERESTION: I have a few questions for you regarding the aforementioned subject. You need to live in Rongo town to participate in this study. Learn more about the advantages and potential risks of participating in this study before deciding.

RISKS TO YOU: Participating in this study is unlikely to pose any material risks to you, but there may be awkward questions as I administer the questionnaire.

BENEFITS TO YOU: The information from this study will strictly be for learning, but your participation in this study will not directly benefit you.

CONFIDENTIALITY AND ANONYMITY: The information you share with us will remain strictly confidential. The data will be used only for the study, and confidentiality will be protected. The content will only be discussed with the research supervisor and committee members. Anonymity will be covered by not recording your name.

Your name will not be used when presenting results and reports.

I have read/had this form explained. I understand the reasons for the study, and my questions have been answered. I know the risks and benefits. Nevertheless, I enrolled in this study of my own free will.

Signature of Interviewer…… Date……...

Appendix II: Research Semi-Structured Questionnaire

TITLE: TO DETERMINE FACTORS ASSOCIATED WITH THE UPTAKE OF FAMILY PLANNING SERVICES IN RONGO SUB-COUNTY.

Date _____ Participant's serial no._____

SECTION A: DEMOGRAPHIC CHARACTERISTICS

(Tick (✓) appropriately in front of the option applicable to your case for questions 1-5)

1. Bio-Data of the Respondent

Age		Marital Status		Highest Level of Education		Number of living children		Religion		Occupation	
18 - 24		Married Monogamous		University		Boys		Catholic		Farmer	
25 - 34		Married polygamous		College		Girls		Protestant		Housewife	
35 - 44		Single		Secondary		Total		Muslim		Business lady	
45-49		Separated		Primary				Pagan		Employed	
		Windowed		None				Other			
		Divorced									

2. Bio-Data (Spouse's Characteristics if married)

Age		Highest Level of Education		Religion		Occupation	
18 - 24		University		Catholic		Farmer	
25 - 34		College		Protestant		Unemployed	
35 - 44		Secondary		Muslim		Businessman	
45-49		Primary		Pagan		Employed	
		None		Other			

SECTION B: SOCIAL-ECONOMIC CHARACTERISTICS

(Tick (✓) appropriately in front of the option applicable to your case for questions 3-18)

3. Economic characteristic (Household)

Monthly income contributed by respondent		Monthly income contributed by the spouse if married
0		0
< 10000		< 10000
10000-20000		10000-20000
20000-30000		20000-30000
30000-40000		30000-40000
>40000		>40000

4. Did you plan to give birth to the current child later?

Yes [ ] No [ ]

5. If yes, what happened?

a) God's plan [ ]
b) No family planning services [ ]
c) I do not know [ ]

6. Were you expecting to be pregnant this time?

Yes..... [ ] No..... [ ] Not sure … [ ]

7. **Did you use or visit FP services?** Yes [ ] No [ ]

8. If not, what possible excuses do you have for not using these FP services?

a) Religious beliefs [ ]
b) Unavailability of family planning services [ ]
c) Resistance from my partner (s) [ ]

d) Cultural beliefs [ ]

e) The fear instilled by other people/hearing [ ]

9. Does your partner approve of the use of Family Planning services?

Yes [ ] No [ ]

10. Does your religion support the use of these services?

Yes [ ] No [ ] Not sure [ ]

11. What other cultural issues from your society may encourage or discourage you from using Family planning services?

……

……

……

12. Have you had unintended or unplanned pregnancies before? Tick (✓) appropriately in front of the option applicable to your case.

1. Have you ever had unintended pregnancies?	Yes □	No □
2. What options did you choose?	Abortion	Retaining the pregnancy
3. Why did you choose the choice made?		
4. Did the service provider support you in choosing?	Yes □	No □
If not why?		

13. Do you know of any family planning or contraception options?

Yes [ ] No [ ]

14. **Which methods of family planning do you know (You can tick more than one)**

a) Oral Pills [ ]

b) Injectable [ ]

c) Intra Uterine Contraceptive (IUCD) [ ]

d) Norplant/Implants [ ]

e) Condom [ ]

f) Emergency Contraceptive (Morning after Pills) [ ]

g) Vaginal Rings [ ]

h) Female Sterilization (Tubal Ligation) [ ]

i) Natural Family Planning [ ]

j) Others (Specify) …….. [ ]

15. What sources did you use to learn about family planning services? Select the option that best applies to your situation and mark (p) appropriately.

a) Hospital/Health Worker [ ]

b) Mass Media (TV/Radio, Newspaper) Internet [ ]

c) Friends/Relatives, Classroom [ ]

d) Others (Specify) ----------……...

16. Do you have formal training or education in family planning services?

Yes [ ] No [ ]

17. If yes, by which institution or organization?

a) From the hospital [ ]

b) From an NGO [ ]

c) Others (Specify) …….

18. What are the advantages of using birth control, in your opinion??

a) Decrease the danger of HIV/STIs. [ ]

b) Fewer cancers. [ ]

c) Proper child spacing.

d) Decrease maternal morbidity. [ ]

e) Abortion rates should decline. [ ]

f) Development of children. [ ]

g) Keep your youth and appeal. [ ]

SECTION C: HEALTH FACILITY FACTORS FOR UPTAKE OF FAMILY PLANNING SERVICES

(Tick (✓) appropriately in front of the option applicable to your case for questions 19-30)

19. Previous use of Family Planning services?

Ever used any modern FP services		Method ever used		If never used, would you consider using it?	
Yes		Barrier methods, e.g., condoms		Yes	
No		Hormonal methods, e.g., e-pills		No	
		Surgical contraception, e.g., Tubal ligation			

20. If you have never used or would not consider using financial planning services, why wouldn't you use them??

……

……

……

21. **Would you like to have a child (or children) soon?**

Yes [ ] No [ ]

using any FP services right now		**Which FP method, in your opinion, is the most popular?**		**Availability of the approach you're using**		**The price of purchasing this approach**	
Yes		Barrier methods, e.g., condoms		Always		Very affordable	
No		Hormonal methods, e.g., e-pills		Not always		Affordable	
		Surgical contraception, e.g. Tubal ligation				Not affordable	
		Natural methods, e.g., safe periods					

22. Family planning services currently used?

……

23. If you employed barrier or hormonal techniques, where did you obtain them from?

a) Health centres/dispensaries

b) Chemists/shops

c) Other specify…….

24. Before obtaining your modern FP services, were you given any advice in the location where you sourced them?

Yes [ ] No [ ]

25. **If not, where else can you learn about cutting-edge FP services?**

……

……

……

……

26. What obstacle or challenge do you believe prevents you from using contraceptives and family planning services??

a) No supplies [ ]

b) No health care providers [ ]

c) Fear installed by other people Constant [ ]

27. Which provider of family planning services was preferred?

Preferred source		Distance to the preferred source		Expenses associated with getting to and from the preferred source	
Health centres/dispensaries		Very far		Very affordable	
Chemists/shops		Far		Affordable	
Other (specify)		Not far		Not affordable	

28. **Have you ever had negative effects from utilizing any contemporary FP services?** Yes [ ] No [ ]

29. **Does a myth that prevents you from using contemporary FP services? If the answer is** a) Yes [ ] b) No [ ]

30. If yes, describe these myths.

……..

……..

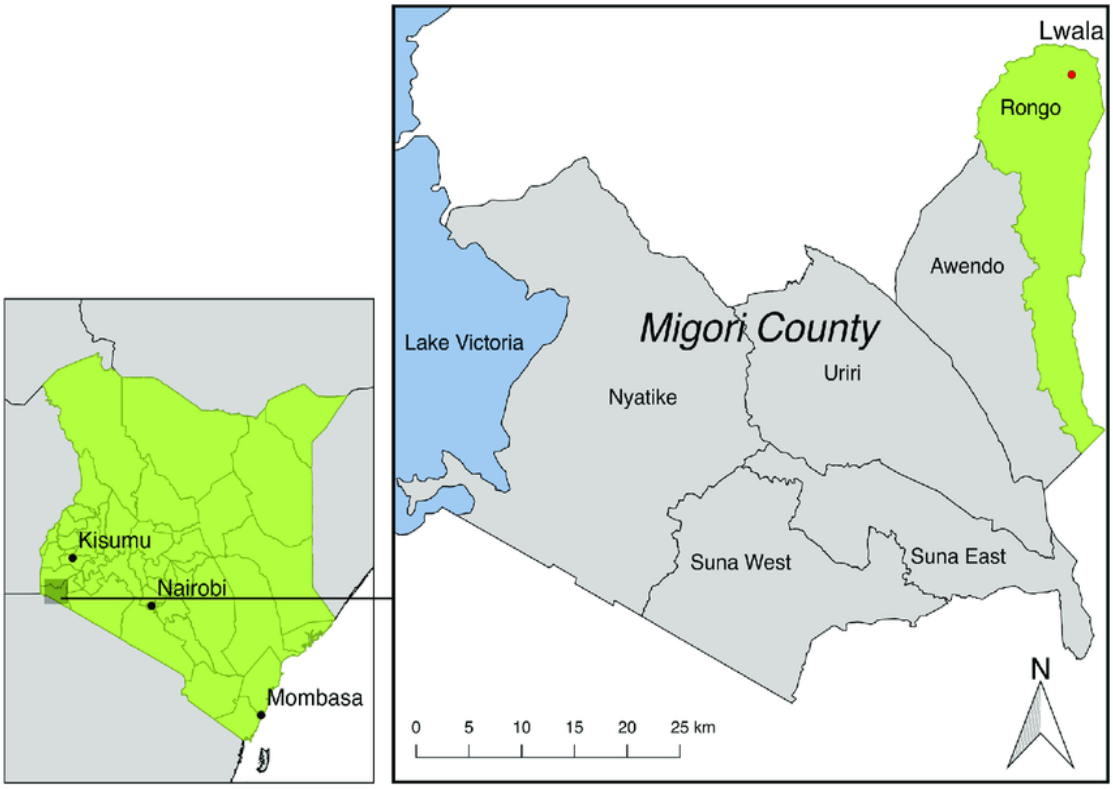
……..

……

Appendix III: Key Informant Interview

1. How many more unintended or unplanned pregnancies do you believe are occurring in this area?
2. Who do you believe was most impacted?
3. What obstacles do women encounter when obtaining FP?
4. Are services available in this area?
5. What steps could be taken to guarantee the continuation of FP services in times of need?
6. Have you ever received any formal instruction or training regarding family planning services?

Appendix IV: Map Of Rongo Sub-County



Appendix V: School of Health Sciences Approval Letter

JARAMOGI OGINGA ODINGA UNIVERSITY OF SCIENCE AND TECHNOLOGY SCHOOL OF HEALTH SCIENCES

INTERNAL MEMO

TO: Director, Board of Postgraduate Studies **DATE:** 6th /07/2019

FROM: Postgraduate Coordinator - SHS **REF:** JOOUST/SHS/90

SUBJECT: ETHICAL APPROVAL (OTIENO CHURCHILL OCHIENG -H153/4207/2017)

The above matter refers.

This is to verify that the above mentioned is a postgraduate student in Jaramogi Oginga Odinga University of Science and Technology in the School of Health Sciences undergoing a course leading to **Master of Public Health**

He has completed his course work and successfully defended his proposal entitled "Factors Associated with Outcome of Unmet Need for Family Planning Services during Covid 19 Pandemic among Antenatal and Postnatal Women Attending Clinic at Rongo Sub-County Hospital, Migori County, Kenya" on May 31st, 2019.

The purpose of this letter therefore is to request you to write him an introductory letter so that he can submit his proposal for ethical approval at the JOOUST Ethics Committee.

Attached is the abstract and a copy of a proposal for your action.

Thank you.

George Ayodo, PhD
Postgraduate Coordinator School
of Health Sciences

Copied, Dean, SHS

APPENDIX VI: Board o**f Postgraduate Studies Ethical Approval Letter**

JARAMOGI OGINGA ODINGA UNIVERSITY OF SCIENCE & TECHNOLOGY

BOARD OF POSTGRADUATE STUDIES

Office of the Director

Tel. 057-2501804
Email: bps@jooust.ac.ke

P.O. BOX 210 - 40601
BONDO

Our Ref: H152/4207/2017 **Date**: 19th April 2021

TO WHOM IT MAY CONCERN

RE: OTIENO CHURCHILL OCHIENG – H152/4207/2017

The above person is a bonafide postgraduate student of Jaramogi Oginga Odinga University of Science and Technology in the School of Health Sciences pursuing Master of Public Health. He has been authorized by the University to undertake research on the topic: ***"Factors Associated with Outcome of Unmet Need for Family Planning Services during COVID 19 Pandemic among Antenatal and Postnatal Women Attending Clinic at Rongo Sub-County Hospital, Migori County, Kenya".***

Any assistance accorded him shall be appreciated.

Thank you.

DIRECTOR POST GRADUATE STUDIES DATE P.O. BOX 210 - 40601 BONDO UNIVERSITY OF SCIENCE & TECHNOLOGY

Prof. Dennis Ochuodho
DIRECTOR, BOARD OF POSTGRADUATE STUDIES

Appendix VII: JOOUST - Ethical Approval Letter

JARAMOGI OGINGA ODINGA
UNIVERSITY OF SCIENCE AND TECHNOLOGY

DIVISION OF RESEARCH, INNOVATION AND OUTREACH
JOOUST-ETHICS REVIEW OFFICE

Tel. 057-2501804
Email: erc@jooust.ac.ke
Website: www.jooust.ac.ke

P.O. BOX 210 - 40601
BONDO

OUR REF: JOOUST/DVC-RIO/ERC/E2

16th December, 2021

Churchill Otieno Ochieng'
SHS
JOOUST

Dear Mr. Ochieng',

RE: APPROVAL TO CONDUCT RESEARCH TITLED *"FACTORS ASSOCIATED WITH OUTCOME OF UNMET NEED FOR FAMILY PLANNING SERVICES DURING COVID 19 PANDEMIC AMONG ANTENATAL AND POSTNATAL WOMEN ATTENDING CLINIC AT RONGO-SUB COUNTY HOSPITAL, MIGORI COUNTY, KENYA".*

This is to inform you that JOOUST ERC has reviewed and approved your above research proposal. Your application approval number is **7/15/ERC/12/20-7.** The approval period is from 16th December, 2020 – 15th December, 2021.

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 JOOUST IERC.
iii. Death and life threatening problems and serious adverse events or unexpected adverse events whether related or unrelated to the study must be reported to NACOSTI IERC within 72 hours of notification.
iv. Any changes, anticipated or otherwise that may increase the risks of affected safety or welfare of study participants and others or affect the integrity of the research must be reported to NACOSTI IERC 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 JOOUST IERC.

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

Yours sincerely,

Prof. Francis Aiga wa
Chairman, JOOUST ERC

Copy to: Deputy Vice-Chancellor, RIO Director, BPS Dean, SHS

Appendix VIII: NACOSTI Research License

REPUBLIC OF KENYA

NATIONAL COMMISSION FOR SCIENCE,TECHNOLOGY & INNOVATION

Ref No: **374231**

Date of Issue: **04/November/2020**

RESEARCH LICENSE

This is to certify that Mr. OTIENO OCHIENG of Jaramogi Oginga Odinga University of Science and Technology, has been licensed to conduct research in Migori on the topic: FACTORS ASSOCIATED WITH OUTCOME OF UNMET NEED FOR FAMILY PLANNING SERVICES DURING COVID 19 PANDEMIC AMONG ANTENATAL AND POSTNATAL WOMEN ATTENDING CLINIC AT RONGO SUB-COUNTY HOSPITAL, MIGORI COUNTY for the period ending 04/November/2021.

License No: **NACOSTI/P/20/2137**

374231

Applicant Identification Number

Director General
NATIONAL COMMISSION FOR SCIENCE,TECHNOLOGY & INNOVATION

Verification QR Code

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

Appendix IX: NACOSTI Research License (Back Page)

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
5. The License does not give authority to tranfer research materials
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 of completion of the research
8. NACOSTI reserves the right to modify the conditions of the License including cancellation without prior notice

National Commission for Science, Technology and Innovation
off Waiyaki Way, Upper Kabete,
P. O. Box 30623, 00100 Nairobi, KENYA
Land line: 020 4007000, 020 2241349, 020 3310571, 020 8001077
Mobile: 0713 788 787 / 0735 404 245
E-mail: dg@nacosti.go.ke / registry@nacosti.go.ke
Website: www.nacosti.go.ke

Appendix X: Migori County Health Department Approval Letter

REPUBLIC OF KENYA

MIGORI COUNTY- HEALTH DEPARTMENT.

COUNTY PUBLIC HEALTH OFFICE
MIGORI COUNTY
P O BOX 1045-40400

SUNA –MIGORI.

18TH FEBRUARY 2020

REF. MOH/MIG./PH/27/2020

TO WHOM IT MAY CONCERN.

Dear Sir/Madam

RE: AUTHORIZATION TO CARRYOUT A STUDY IN MIGORI COUNTY

The bearer is a postgraduate student at Jaramogi Oginga Odinga University of Science and Technology in the school of health sciences. This office has authorized him to carry out a study titled, "Factors associated with outcome of unmet need for family planning services during Covid-19 pandemic among antenatal and postnatal women attending clinic at Rongo Sub County Hospital, Migori County, Kenya". Therefore accord him the assistance hemay require for the mentioned study.

NAME	:	OTIENO CHURCHILL OCHIENG
REGISTRATION NUMBER	:	H152/4207/2017
ID NO.	:	25117242
CONTACT	:	0729889529

Thank you.

DIRECTOR PUBLIC HEALTH
MIGORI COUNTY
Email: ndongakennedy@gmail.com
18 FEB 2020
Tel: 0722-961 226

MR.DUNCAN ZEBBY ARUNDA
FOR: DIRECTOR PUBLIC HEALTH MANAGEMENT.
MIGORI COUNTY.

CC.

- ***CECM-Health Department***
- ***Chief Officer Medical Services***
- ***Chief Officer Public Health Management***
- ***Director Medical Services***

Appendix XI: Migori County Ministry of Education Authorization Letter

MINISTRY OF EDUCATION
State Department of Education

Telephone: (059) 20420
Fax: 05920420
When replying please quote

COUNTY DIRECTOR OF EDUCATION
MIGORI COUNTY
P.O. Box 466-40400
SUNA – MIGORI

REF: MIG/CDE/ADMN./1/VOL.III/ 238

DATE. 18th December 2020

Otieno Churchill Ochieng
Jaramogi Oginga Odinga University of Science and Technology
P.O Box 210 – 40601
BONDO

RE: RESEARCH AUTHORIZATION

Following your application for authority to carry out research on ***"Factors associated with outcome of unmet need for family planning services during Covid 19 pandemic among antenatal and postnatal women attending clinic at Rongo Sub-County Hospital, Migori"*** I am pleased to inform you that you have been authorized to undertake research in **Migori County** for a period ending **4th November, 2021**.

On completion of the research, you are expected to submit one hard copy and a soft copy of the research report/Thesis to this office.

Thank you.

PP

COUNTY DIRECTOR OF EDUCATION MIGORI P. O. Box 466, SUNA - MIGORI.

Luka Chebet
County Director of Education
MIGORI COUNTY

Appendix XII: Migori County Ministry of Interior Permission Letter

OFFICE OF THE PRESIDENT
MINISTRY OF INTERIOR AND COORDINATION OF NATIONAL GOVERNMENT

Telephone: (059) 20511
FAX (059)20361
Email:
countycommissionermigori@yahoo.com

OFFICE OF THE COUNTY COMMISSIONER
MIGORI COUNTY
P.O. BOX 2 - 40400
SUNA- MIGORI.

When replying please quote

Ref. No:ED.12/20VOL.I/249

Date: 18th December, 2020

TO WHOM IT MAY CONCERN

RE: RESEARCH AUTHORIZATION

Otieno Churchill Ochieng NACOSTI/P/20/2137 a student at Jaramogi Oginga Odinga University of Science and Technology has been authorised to carry out research on "***Factors associated with outcome of unmet need for family planning services during Covid 19 pandemic among antenatal and postnatal women attending clinic at Rongo Sub-County hospital, Migori county***" for the period ending 4th November 2021.

Accord him the necessary assistance.

COUNTY COMMISSIONER P.O BOX 2 — 40400 SUNA — MIGORI COUNTY

PETER G. MUTU
FOR: COUNTY COMMISSIONER
MIGORI COUNTY