

**BARRIERS TO UTILIZATION OF MODERN CONTRACEPTIVE METHODS USED BY
FEMALES AGED 15-24 YEARS. A CASE STUDY OF MOYO DISTRICT**

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ABSTRACT

Introduction: Modern contraceptives are medical procedures that interfere with reproduction or acts of sexual intercourse. Moyo district contraceptive prevalence used by females aged 15-24 years is 6.03% which is far from the national target. The low contraceptive use among this age group results in high school drops, unwanted pregnancy, early child marriage, and community disputes.

General Objective: To evaluate barriers associated with the utilization of modern contraceptive methods used by females aged 15-24 years in Moyo district.

Methodology: A cross-sectional design with mixed methods of quantitative and qualitative approaches was used. The reason of using cross-sectional design is to measure the exposure and outcome variables at the same time, its relatively quick and inexpensive, and findings can be used to create an in-depth research study. Multistage sampling was used to draw 423 participants for quantitative and 23 participants were purposively selected for Qualitative study based on knowledge and experience, the results were analyzed using SPSS Version 20 and open code software and presented in the form of tables, pie charts, graphs, and descriptives.

Results: The findings indicated marital status OR 3.193, P-Value 0.000 and CI (2.002-5.091), Family/Community influence OR 1.644, P-Value 0.019 and CI (1.084-2.493) and Cultural influence OR 2.004, P-Value 0.006 and CI (1.218-3.298) tend to be associated with using contraceptives. Desire for children OR 0.459, P-Value 0.002 and CI (0.279-0.756) and long waiting time OR 0.442, P-Value 0.003 and CI (0.258-0.756) tend to be not associated with the use of modern contraceptives.

Conclusion: The findings of this study have shown both individual and socio-cultural factors contribute to low utilization of modern contraceptives among females aged 15-24 years and these needs to be address with involvement of different stakeholders.

DECLARATION

I, **Azoru Luchio Mua** do hereby declare that this research report entitled Barriers to utilization of modern contraceptives used by females aged 15-24 years in Moyo district Uganda has been prepared and submitted in fulfillment of the requirements of the master of public health Program is my original work and had never been submitted to any institution or university for the academic award, any other work is acknowledged by citation.

SIGNATURE: -

A handwritten signature in black ink, appearing to read 'Azoru Luchio Mua', with a vertical line extending downwards from the end of the signature.

DATE: 28th March 2024

DEDICATION

This book is dedicated to my dear family, relatives and friends.

ACKNOWLEDGEMENT

I would like to begin by expressing my appreciation first to Access for humanity (AFH) organization for the support given to me during my MPH program, without them I wouldn't have financed the study. Thank you, the team, for the continued guidance, support and opportunities given to me, that enabled me to continuously grow my career.

Secondly to UCU faculty of Public Health Nursing and Midwifery program, first for giving me this precious opportunity to participate in this excellent and informative program and for your continued technical support and guidance during my studies.

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To my dear wife, you were so supportive right from the beginning of this program. You endured my absence and tight schedules patiently and this encouraged me to work harder. Your presence in my life will always be felt.

APPROVAL

This research report entitled, Barriers to utilization of modern contraceptives methods used by females aged 15-24 years in Moyo District has been prepared under my supervision and its now ready for submission to university awards.

Signature:



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Acronyms and Abbreviations

DHIS: District health information system

FP-CIP: Family planning costed implementation plan.

IUCs: Intrauterine contraceptives

MCPR: Modern contraceptive prevalence rate

MOH: Ministry of health

REC: Research ethical committee

TFR: Total fertility rate

UCU: Uganda Christian university

UDHS: Uganda demographic health survey

UNFPA: United nation fund population agency.

VHT: Village health teams

Operational definitions

Adolescents: Any person between ages 10 and 19. This age range falls within WHO's definition of young people, which refers to individuals between ages 10 and 24.

Age at first marriage: Age at first marriage is divided into four categories: women who married before age 15; women who married at age 15-19; and women who married at age 20-24.

Attitude refers to the positive or negative feelings or tendencies of an individual about an idea, of modern contraceptives.

Barriers: A circumstance or obstacle that prevents movement or access to modern contraceptives by young women.

Contraceptive prevalence is the percentage of women who are currently using, or whose sexual partner is currently using, at least one method of modern contraceptives, regardless of the method used.

Family planning allows individuals and couples to anticipate and attain their desired number of children and the spacing and timing of their births. It is achieved through the use of contraceptive methods and the treatment of involuntary infertility.

Modern contraceptives; are products or medical procedure that interferes with reproduction from acts of sexual intercourse. This method includes sterilization (Male and Female), Intrauterine devices (IUDs), Implants, oral contraceptives, condoms (male

and female), injectables, emergency contraceptive pills, Patches, Diaphragm and cervical caps, spermicidal agents, vaginal rings, and sponges.

Parity: refers to the number of births after 20 weeks of gestation. OR is a woman who has live children.

SPSS is a statistical software suite developed by IBM for data management.

Unmet need: Women with unmet needs are those who are fecund and sexually active but are not using any method of contraception, and report not wanting any more children or wanting to delay the next child.

Utilizations: refers to the use of something or the process of using it effectively.

Chapter One

1.0 INTRODUCTION

Modern contraceptives are products or medical procedure that interferes with reproduction or acts of sexual intercourse (Hubacher and Trussell, 2015).

This method includes sterilization (Male and Female), Intrauterine devices (IUDs), Implants, oral contraceptives, condoms (male and female), injectable, emergency contraceptive pills, Patches, Diaphragm and cervical caps, spermicidal agents, Vaginal rings, and sponge.

About 75 million of the estimated 180-200 million pregnancies that occur in the world annually are reported unintended, and a high proportion of these occur in adolescence (Batwala, Nuwaha, Mulogo, Bagenda, Bajunirwe, and Mirembe, 2006).

The global modern contraceptive use among adolescents 15-19 years is 15 percent, and according to the region Latin America and the Caribbean are with the highest with 46 percent, Eastern Europe and Central Asia 17%, Asia and Pacific 16 %, East and southern Africa 15%, Arab states 14% and West and Central Africa are the lowest with 4% (UNFPA, 2015)

The prevalence of contraceptive use varies greatly by region across Asia. It is relatively higher about 83 percent in East Asia, and a bit lower 54 percent in South West and 57 percent in Central Asia. The use of modern contraceptive methods also varies, ranging from 81 percent in East Asia to 36 percent in West Asia. Variation between countries is even greater, ranging from 19 percent in Afghanistan, and modern methods accounting for 16 percent to 85 percent in China (Baochang Gu, and Yan Che, 2013)

According to report conducted by Tessema, Teshale, Tesema, Yeshaw, Worku (2021), in 2017 around 214 million reproductive-age women in developing regions who want to avoid pregnancy do not use a modern contraceptive method. The use of modern contraceptives in 2017 prevented an estimated 308 million unintended pregnancies.

In the study conducted by Ahinkorah, Budu, Aboagye, Agbaglo, Arthur-Holmes, Adu, Archer, Aderoju, and Seidu (2021), Modern contraceptive use among women with no fertility intention in sub-Saharan Africa is 29.58% but among African countries it is highest in Zimbabwe with 62.2% and remained lowest in Chad with 7.65 %,

In sub-Saharan Africa and Asia, more than 60% of adolescents who wish to avoid pregnancy have unmet need for modern contraception. The adolescents who do not use modern contraception rely instead on a traditional method of family planning accounting for more than 80% of unintended pregnancies among adolescents (Murigi, Butto, Barrasa, Maina, and Munyalo, 2016).

In Senegal, the modern contraceptive prevalence rate (MCPR) increased from 5% in 1993 to 19% in 2017 and reducing the total fertility rate from 6.0 to 4.6 in the same period with a focus on child spacing among married women, (Cohen, Mendy, Wesson, Protti, Cissé, Gueye, Trupe, Floreak, Guichon, Lorenzana, and Buttenheim, 2020)

In Kenya, young women experience a higher risk of untimely and unwanted pregnancy compared to older women. 15-24 years' young women have 32% untimely and 30% unwanted pregnancies. Contraceptives use remains low among youth and 73% of sexually active single women of age 15-19 report not using any contraceptive methods. Every year, about 13,000 Kenyan girls drop out of school due to accidental

pregnancy, and 103 out of every 1000 births in Kenya are delivered to girls aged 15-19 years (Ochako, Mbono, Aloo, Kaimenyi, Thompson, Temmerman, and Kays ,2015)

According to Uganda's demographic Health Survey (UDHS 2016), indicated that the modern contraceptive prevalence rate was 35%, the unmet need for family planning was 28 %, and 43.2 % occurs in the West Nile region compared to other regions in Uganda. The use of modern contraception is one of the most cost-effective public health interventions that have the potential to prevent about 30% of maternal and 10% of child deaths in developing countries.

The unmet need for family planning is not uniform across the country. There are regions in the country with a much higher unmet need than the national average of 28%: West Nile region where Moyo district is found which is the study area stands with the highest of (43.2%), Acholi (39.0%), Busoga (36.5%) and Teso (36.3%) (UDHS, 2016).

1.1 Background to the study

Long before some records suggest many Indigenous nations practiced extended nursing to reduce the chances of pregnancy. By **Mid-1950s**: Clinical trials on the pill began. Researchers concluded the pill successfully prevents ovulation and in **1960**, The FDA approves the pill for birth control, In**1964**, The Lippes Loop enters the market as the first IUD available in the United States, and in **1967**, The Depo-Provera shot becomes available, but the FDA denies approval which was later approved in **1992**, in **1970s** The introduction of fiberoptic technology allows for safer medical procedures and shorter recovery times, prompting many to consider tubal ligation as

a permanent form of birth control, in 1988, ParaGard, the copper IUD, becomes available.

In 1912, Margaret Sanger started the modern birth control movement by writing a newspaper column about the subject, she was concerned about women affected by frequent childbirth, miscarriages, and unsafe abortions. In 1916, she opened the first birth control clinic. In the early part of the 20th century, the focus was on the need for married couples to space children and limit family size. The Supreme Court in *Griswold v. Connecticut* struck down state laws prohibiting birth control use by married couples. In the 21st Century, Family planning law continues to change. People on both sides of the debate feel strongly, often for reasons related to religion or mothers' health (Find Law, 2018).

1.2 Problem statement

The government of Uganda has expanded national health infrastructures up to the parish level with family planning services across the country, a good family planning policy that promotes young women to have access to contraceptives without consent from partners/parents.

According to Nalwadda, Mirembe, Byamugisha, and Faxelid (2010), only 24 % of married women aged 15-24 years use modern contraceptive methods and 5% use traditional methods. In Uganda 1 in 4 adolescent women aged 15-19 are mothers or pregnant with their first child and the West Nile region has the highest adolescent birth rate of 134 to 146 per 1000 of which 8.6 to 11.4 percent have turned to adolescent motherhood in Moyo district (UDHS, 2016).

Data from the District health information system (DHIS2, 2020) indicates Moyo district has 724/11998 females in the age range of 15-24 years using modern

contraceptives contributing to 6.03 % contraceptive prevalence which is far from the national target. The low contraceptive use among this age group results in high school drops-out, unwanted pregnancies, early childhood marriage, community disputes, unsafely induced abortions, and high maternal morbidity and mortality.

Despite free contraceptives in public health facilities, the utilization remains very low among young women in West Nile, particularly in Moyo district and no documented evidence exists. Therefore, the study contributed to the information gap as far as the barriers to the utilization of modern contraceptive methods used by females aged 15-24 years in Moyo district are concerned.

1.3.0 General Objective

To evaluate barriers associated with utilization of the modern contraceptive methods used by females aged 15-24 years in Moyo district.

1.3.1 Specific Objectives

1. To enhance individual barriers to the utilization of modern contraceptives method.
2. To explore the socio-cultural barriers to the utilization of modern contraceptives.
3. To assess the health care system and organization barriers to the utilization of modern contraceptives.

1.4 Research questions

1. What are the individual barriers to the utilization of modern contraceptives method?
2. What are the socio-cultural barriers to the utilization of modern contraceptives?

3. What are the health care setting and organizational barriers to the utilization of modern contraceptives?

1.5.0 Scope of Study

1.5.1 Content scope

The study covered the barriers to the utilization of modern contraceptives methods used by females aged 15-24 years. These included namely; individual, socio-cultural, and health care settings/organization. Emphasis was placed on how different factors contribute to the utilization of modern contraceptives.

1.5.2 Geographical scope

The study was conducted among females aged 15-24 years of age in Moyo districts in 6 sub-counties/Town councils, 12 parishes, and 36 villages.

1.5.3 Time

The study was conducted in a period of one year and six months (August 2021 to May 2023) with the following activities Topic identification, Literature review, proposal development, Development of data tool, ethical review by the research committee, data collection, data analysis and final report submission.

1.6 Justification of the study

The government of Uganda has expanded national health infrastructures and good family planning policy which promotes all sexually active men and women to have access to contraceptives, in addition to that Marie stopes and Reproductive health Uganda have improved access and availability but the prevalence is estimated to be about 35 % among women of reproductive age in Uganda and 6.03 % in females aged 15 to 24 years in Moyo district. (UDHS 2016 and DHIS2 2020).

The study explored current barriers to the utilization of modern contraceptives methods used by females aged 15-24 years in Moyo district.

The study can be used by ministry of health (MOH), District health officer, frontline health workers and Village health teams (VHTs) to make contraceptives services accessible and intensify actions to increase demands to utilizations that will contribute to reducing maternal morbidity and mortality, school dropouts, unwanted pregnancies etc.

1.7 Significance of the study

The findings will be used by the district authority, Policy implementers, and program designers for purpose of decision-making to plan, mobilize resources and resolve gaps to improve the utilization that will contribute to the quality of care, reduction in adolescent motherhood, teenage pregnancy, maternal and child morbidity, and mortality rate.

1.8 Conceptual Framework

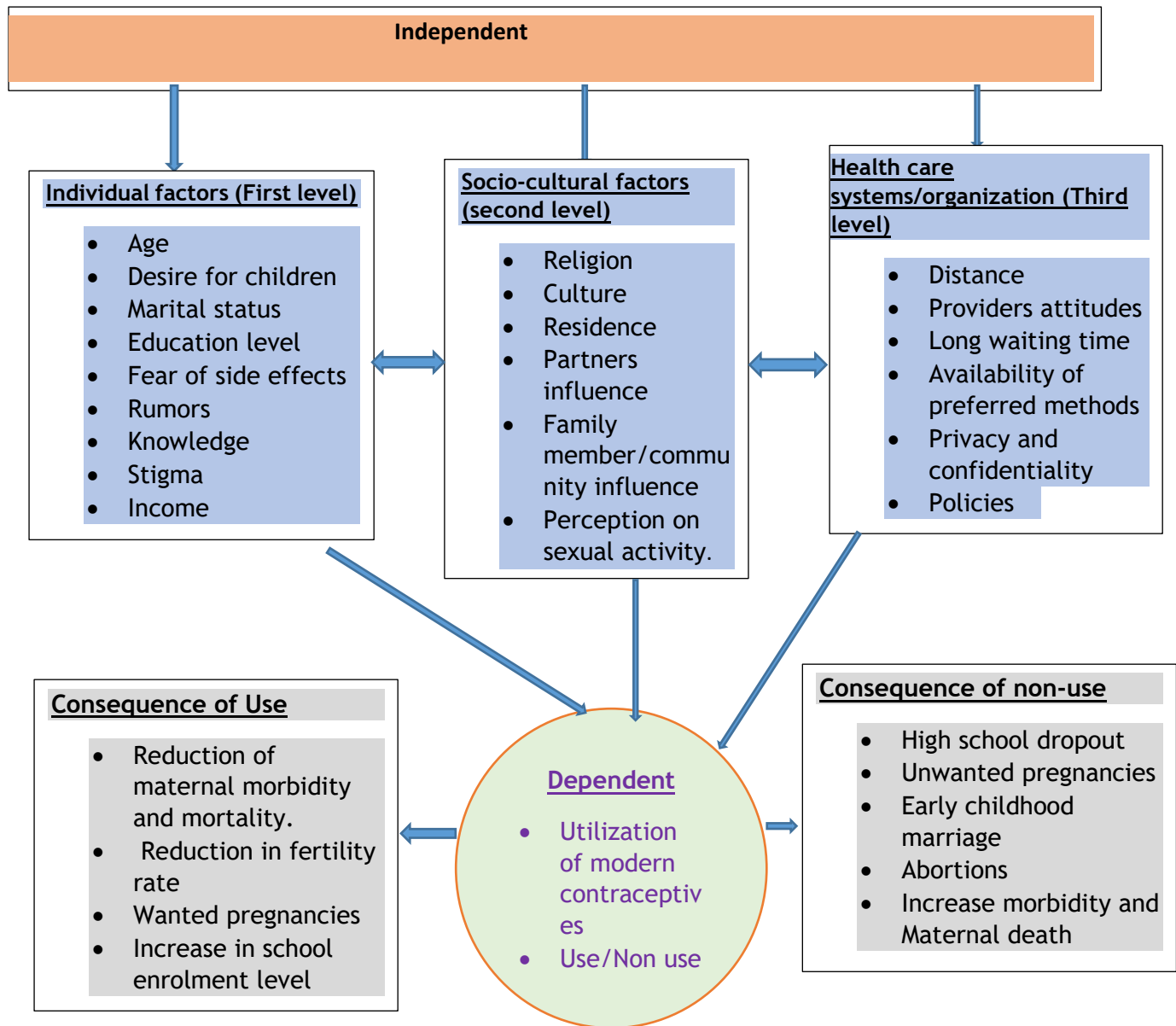
The study adopted and modify the social-ecological model to construct the conceptual framework for barriers to modern contraceptives.

This model was adopted because it makes it easy to understand barriers (Independent) and outcomes (Dependent) to the utilization of modern contraceptives, it allows us to understand the range of factors that put people at risk from utilizing modern contraceptives, and lastly, it's necessary to employ multiple levels (factors) at the same time to achieve its impacts (Dependent).

These models describe obstacles and utilization in three-level indicated below. The first level is Individual factors such as Age, Desire for children, Education, side effects, Rumors, Knowledge, Stigma, and cost. The second level is community described as social-cultural factors example religion, culture, residence, Partners influence, Family member/community influence, and perception of sexual activity. The Third level is society described as organization or health care system factors

such as distance, Providers attitudes, long waiting time, Availability of preferred methods, Privacy and confidentiality, and Policies.

Figure1. Showing Diagrammatic Conception Framework



Chapter Two

2.0 LITERATURE REVIEW

2.1 Introduction

The literature review presents data for each independent variable included in the conceptual framework on barriers to the utilization of modern contraceptives. These include the followings; individual factors, socio-cultural factors, and health care system and organization setting factors.

2.2 Individual Factors

2.2.1 Age

According to Sserwanja, Musaba, and Mukunya (2021), a study on Prevalence and factors on utilization of modern contraceptives among female adolescents indicated that married adolescents were 60% more likely to utilize modern contraceptive compared to non-married adolescents. Adolescents whose age at first birth was less than 15 years were twice as likely to utilize modern contraceptive compared to those whose age at first birth was between 15-19 years.

According to Sensoy, Korkut, Akturan, Yilmaz, Tuz, and Tuncel (2018), a study on Factors Affecting the Attitudes of Women toward Family Planning found that 26% of women in age 15-25 years would want to have another child in two years.

According to Kabagenyi, Habaasa, and Rutaremwa (2016), a study on Low contraceptive use among young females in Uganda found that Uganda is rated as one of the countries with the highest total fertility rates in the world (TFR = 6.2), and the median age at first sexual intercourse is 16.8 years, an age which is considered to be vulnerable to sexual and reproductive health challenges the age at first marriage for females is 17.9 years while the female age at first birth in Uganda is 19.1 years for adolescents aged 15-24.

In the study by Eltomy, Saboula, and Hussein (2013), on Barriers affecting utilization of family planning services among rural Egyptian women, age was significantly related to reproductive barriers and three-quarters of the non-users were 21-30 years old. Duration of marriage was significantly related to demographic barriers. These findings are reasonable since they relate to the desire to start a family early in the marriage and they are young and less experienced in using FP methods.

2.2.2 Education

According to a study conducted by Sensoy et al. (2018), on Factors Affecting the Attitudes of Women toward Family Planning, found that women who had a primary school graduate or higher education had 1-3 pregnancies and did not want more children in the future. As the level of education increases, the number of children required decreases.

According to the study conducted by Ouma, Turyasima, Acca, Nabbale, Obita, Rama, Adong, Openy, Beatrice, Odongo-Aginya, and Awor (2015) on obstacles to family planning use among rural women in Atiak health center IV, Amuru district, northern Uganda found that above 58.0 % of both Ordinary level and Advance level respectively use modern contraceptives methods as compared to 39.6% among women with No education. However, the partner's level of education did not affect the use of family planning.

According to a study conducted by Kabagenyi et al. (2016) on contraceptive use among females, the findings revealed that education was a significant predictor of contraceptive use. The females who had secondary or higher education had an increased likelihood of using contraception contrary to those with no education. As expected the influence of education on reproductive health indicators is of great importance to monitor birth outcomes and the health status of women.

According to United nation fund population agency (UNFPA 2015), a report entitled Universal Access to Reproductive Health: Progress and Challenges, indicated that Adolescents and youth systematically experience less informed choice, lack of education, or money may reduce their ability to access health information or services. Adolescent girls without schooling are three times more likely to give birth than those with secondary education or higher. Living in rural areas can also restrict options.

2.2.3 Knowledge

In a study conducted among men in rural central Uganda in 2018 on knowledge and use of family planning, men were most familiar with male condoms (72%), but many also named injectable hormonal contraception (54%) and birth control pills (52%). There was little familiarity with the most effective contraceptive methods, especially long-acting reversible methods like IUDs and implants (UNFPA, 2020)

According to a study conducted by Gizaw and Regassa (2011) on family planning utilization services, found that knowledge and sources of family planning methods were other important factors for the non-utilization of family planning. Lack of knowledge of family planning methods accounted for 6.5% while a lack of sources of family planning methods was also reported by 4.4% of non-users.

According to a study conducted by Nalwadda et al. (2010), on Persistent high fertility, young people recount obstacles and enabling factors to use of contraceptives in Uganda found out that, awareness of contraceptives is high with 97.5% of people of reproductive age being able to identify at least one contraceptive method. Similar research that has been conducted in Uganda among adolescent schools indicated a 23.8% utilization of contraceptives (Batwala et al, 2006).

2.2.4 Rumors and Beliefs

According to study conducted by Dioubate, Manet, Bangour, Sidibibe, Kouyate, Kolie, Ayodi, and Delamou (2021), a qualitative study on barriers to contraceptive use among adolescents and youth in Conakry Guinea, pointed out that rumors act as a barrier to contraceptive use. The rumors cited includes, Implants can disappear from the body of the users and cannot be found, implants can cause difficulty in childbearing, and contraceptive methods are designed to make young African women sterile. In the same study, it was cited that it is inappropriate and “indecent” to engage in conversations about contraceptive methods before marriage, according to them preservation of the virginity of girls until marriage is an honor for the family and the community.

According to the study conducted by Cohen et al. (2020) on Behavioral barriers to the use of modern methods of contraception among unmarried youth and adolescents in eastern Senegal, some participants reported that It’s dangerous to use family planning because it can disappear in your body and you can no longer have children, some went further to say When a woman uses family planning before marriage, she risks becoming infertile.

According to a study conducted by Ochako et al. (2015) on barriers to modern contraceptive methods uptake among young women in Kenya reported that many of the participant’s fears were based on myths and misconceptions. The largest concern cited by participants was methods that would render them infertile such as pills and implants. In the same study young women reported that the use of contraceptives makes young women sexually promiscuous. Both users and non-users express the beliefs that partners of young women will be unfaithful to their partners.

According to a study conducted by Babirye (2013), on the uptake of modern contraceptives among youths at a community level in Busia district found that some youths were in support of contraceptive use while others thought not all youths should use contraceptives. Some youths perceived contraceptives were meant for the married and those with children and they believed condoms should be for those who are never married and should not use, Depo and pills, unlike married youths.

According to the study conducted by Nalwadda et al. (2010) on Persistent high fertility, young people recount obstacles and enabling factors to the use of contraceptives in Uganda, it was observed that young people believe that contraceptives interfered with fertility, and they were frightened to use something that could harm their ability to reproduce. Most married and unmarried women believed that pills burned the woman's eggs. Both male and female participants believed that pills accumulate in the body causing swellings, such as fibroids, cancer, and destruction of the fallopian tubes.

2.2.5 Stigma

According to a study conducted by Batwala et al. (2006) on contraceptive use among in and out-of-school adolescents found that stigma contributed to 58 percent of out-of-school girls than in-school users which stand at 42 percent, so they fear being talked about in public that they are loose and involve in sexual activity.

2.2.6 Side effects

According to a study conducted by Dioubate et al. (2021) a qualitative study on barriers to contraceptive use among adolescents and youth in Conakry Guinea pointed out that fear of the side effects of FP was an important barrier to the use of these methods. The mentioned side effects included general fatigue, nausea,

insomnia, and menstrual disorders; the consequence of these side effects is infertility.

According to Ochako et al. (2015) a study conducted on barriers to contraceptive uptake among young women, reported that many women mentioned side effects as barriers to the use of contraceptives, these side effects include bleeding, weight changes, and lack of desire for sex, headache, and blood pressure.

According to a study conducted by Nalwadda et al. (2010) on Persistent high fertility, young people recount obstacles and enabling factors to use of contraceptives in Uganda, one of the participants pointed out that side-effects like palpitation, craving for foods like pregnant woman, and dizziness make you sometimes fall in the garden, she said they work for long hours in the sun without a meal and pills can make you too weak to work, they eventually stop using and it is safer to just get pregnant and have a baby.

According to Batwala et al. (2006), a study on contraceptive use among in and out-of-school adolescents found that side effects contributed to 66.3 percent among in-school adolescents as compared to 33.7 percent among outgoing school adolescents not likely to use contraceptives.

2.2.7 Income level

Women belonging to the middle wealth quintile were 91% more likely to utilize a modern contraceptive compared to those in the poorest wealth index in a study conducted on Prevalence and factors associated with modern contraceptive utilization among female adolescents in Uganda. In the same study Adolescents belonging to the poorest wealth quintile were less likely to utilize modern contraceptive methods compared to those belonging to the middle wealth quintile.

Most of the young women in Uganda access contraceptives from private sources with out-of-pocket expenditures. Hence the poor are more likely to have limited access to modern contraceptives due to the out-of-pocket expenditures to purchase the contraceptives or transport expenditures to free public health facilities (Sserwanja et al, 2021).

According to a study conducted by Kabagenyi et al. (2017) pointed out that wealth status influenced women's use of contraception. The females in the richer wealth quintile had increased odds of using contraception compared to the poorest. Undoubtedly, the availability of resources is important in health care in that the wealthy are likely to have access to the desired services as well as want to limit the number of children to accumulate costs in raising children.

According to Ibnouf, Vanden Borne, and Maarse (2007), a study on the utilization of family planning services by married Sudanese women of reproductive age, found that women with a higher socioeconomic status were more likely to use family planning compared to their counterparts with low socioeconomic status.

2.2.8 Cost of contraceptives

According to a study conducted by Dioubate et al. (2021), a qualitative study on barriers to contraceptive use among adolescents and youth in Conakry Guinea, cited lack of financial independence, consultative fees, and incentives for health care providers were the main reason for low utilization of modern contraceptive. The barriers are further fueled if there is a cost of transportation to the health facilities that are very far and parent's reluctance to support the adolescent and the youths. According to the study conducted by Abdalla and Ahmmed (2017), to Evaluate Use and Barriers to Accessing Family Planning Services among Reproductive Age Women

in the White Nile, Rural Districts, Sudan found that 57.7 percent reported that inadequate financial support was one of the factors that hinder the use of modern methods.

Research among Sub-Saharan countries by Moore showed that adolescents are dependent on their parents for economic support contributing to the non-utilization of contraceptive clinic fees and the contraceptive fees hinder adolescent's utilization of contraceptives. In Kenya, the reproductive services are mostly inadequate and inaccessible to adolescents either due to unavailability, unaffordability and the poor attitude from the health caregivers (Murigi et al, 2016)

According to a study conducted by Akintade, Pengpid, and Peltzer (2011), on Awareness and use of and barriers to family planning services among female university students in Lesotho found out that over half 52.5 percent of the participants considered that the costs of family planning services were acceptable but 19.2 percent of participants still consider it slightly too expensive to use family planning.

According to Batwala et al. (2006), a study on contraceptive use among in and out-of-school adolescents found that cost of contraceptives was a barrier to in-school-going adolescents which accounted for 77.1 percent as compared to out-of-school users 22.9 percent.

2.2.9 Marital status

Unmarried young people see modern methods of contraception as inappropriate for people like them. Modern methods of contraception are universally described by the youth and parents as most appropriate or exclusively appropriate for married women with children who would like to space their births. Complicating matters, modern

non-barrier methods of contraception are commonly referred to as “family planning”, underlining that their intended users are for married couples planning their families. Even when youth do think about their options for avoiding pregnancy, modern methods other than condoms are not in their choice set (Cohen et al., 2020)

2.2.10 Desire for children.

The more children a woman already has, the more likely she may not want more children. Eight in 10 (80%) currently married women with six or more children want no more children or are sterilized, as compared with 4% of women who have one child. Women who have no children or one child consider 4.0 children to be ideal on average. In contrast, women with six or more children consider 6.3 children to be ideal (UDH 2016).

2.3 Social-cultural factors

2.3.1 Religion

According to Dioubate et al. (2021) a qualitative study on barriers to contraceptive use among adolescents and youth in Conakry Guinea, one of the participants pointed out that the Muslim religion does not accept use of contraceptives, it is purely clear in the religion that it reduces the number of children (through the use of contraceptive methods) “equals killing the children”, The use of condoms, injections, or other contraceptive methods is not permitted because the religion prohibits premarital sex, Anyone who fails to do so, will be responsible for his or her actions in the afterlife, so among Muslims its forbidden.

According to Abdalla and Ahmmed (2017), a study to Evaluate Use and Barriers to Accessing Family Planning Services among Reproductive Age Women in the White

Nile, Rural Districts, Sudan found that 35.0 percent were as a result of religious hindrances.

According to a study conducted by Gizaw and Regassa (2011), on family planning utilization services in Mojo town, Revealed religious opposition has also appeared to be an important barrier to the non-use of family planning methods which accounted for 7.6 percent of the nonusers.

According to a study conducted by AKintade et al. (2011) on awareness and use of and barriers to family planning services among female university students in Lesotho found that 27.2 percent of respondents pointed to religion as a barrier to the use of modern contraceptive or family planning services.

According to the study conducted by Nalwadda et al. (2010) on Persistent high fertility, young people recount obstacles and the enabling factors to use of contraceptive in Uganda, Participants pointed out that the Churches are in silent opposition or silence. They pass messages or statements like “go out and multiply”, “contraceptive use is murder” and “children are a blessing”. One of the pastors in the church emphasizes that use of family planning methods is killing, it is a big sin in front of God.

2.3.2 Cultural

According to a study conducted by Dioubate et al. (2021), a qualitative study on barriers to contraceptive use among adolescents and youth stated that all practices related to sexuality are taboo and unmarried people are supposed to be religious and faithful and must therefore keep their virginity until marriage. These were seen in the majority of ethnic groups such as Malinke or Peulh.

According to a study conducted by Cohen et al. (2020) a qualitative study on behavioral barriers to the use of modern methods of contraception among unmarried

youth and adolescents in Senegal reported that ethnic such as Kedougou and Tambacounda, consider discussion of sex and contraceptives as a taboo. Only a few of the young people interviewed reported discussing contraceptive use with their partner ahead of sex, instead prefer to discuss sexual health topics with friends of their gender.

According to the study conducted by Ouma et al. (2017) on obstacles to family planning use among rural women in Atiak health center IV, Amuru district, Northern Uganda found that culturally people thought there was no need for family planning since land was abundant and they needed to multiply and fill the land.

There is limited cultural space to discuss sexuality between parents/guardians and children, which means that young people are often left to seek information on sexuality matters on their own or to experiment with sex, and hence, engage in risky sexual behavior (UDHS, 2016).

According to the study conducted by Nalwadda et al. (2010) on Persistent high fertility, young people recount obstacles and enabling factors to use of contraceptives in Uganda, Participants revealed that traditional societal norms prohibit sexual activity and pregnancy before marriage. Furthermore, cultural norms condemn parents talking with their children about sex.

2.3.3 Residence

According to Sensory et al. (2018) a study of Factors Affecting the Attitudes of Women toward Family Planning, found out that women in urban settings were more likely to use contraceptives compared to the rural women. The factors revealing these differences are availability of social services such as education, access to health services, information and family planning services.

According to UNFPA (2015), a report entitled Universal Access to Reproductive Health: Progress and Challenges indicated that in West and Central Africa, adolescents living in rural areas are more than two times as likely to give birth as their urban counterparts i.e. 167 versus 77 births per 1,000 women aged, 15-19.

2.3.4 Partners influence

According to a study conducted by Dioubate et al. (2021) a qualitative study on barriers of contraceptives use among adolescents and youth in Conakry Guinea, pointed out that refusal of men to support their partners financial or physiological was a barrier, it further stated that if partners gave them peace of mind to use the methods since they are the decision-makers in the family, the approval of their partners/spouse is important to avoid future conflicts.

According to Abdalla and Ahmmed (2017) a study to Evaluate Use and Barriers to Accessing Family Planning Services among Reproductive Age Women in the White Nile, Rural Districts, Sudan found out that 25.0 percent Husband refused their partner to use family planning methods.

According to a study conducted by Ouma et al. (2017), on obstacles to family planning use among rural women in Atiak health center IV, Amuru district, Northern Uganda found out that 17.2 percent said their husbands forbid them from using family planning methods.

Sixty-two percent of currently married women who are using family planning reported the decision to use contraception is usually made jointly with their husband, 31 percent said that it is mainly their own decision, and 7 percent said that it is mainly their husband's decision. Among currently married women who are not using family planning, 44 percent reported that they mainly make the decision not

to use contraception jointly with their husband, 41 percent reported that it is mainly their own decision and 12 percent reported that it is mainly their husband's decision (UDHS 2016)

In many regions, adolescent girls, who often marry much older husbands, have limited power to negotiate contraceptive use and family planning (UNFPA 2015)

According to a study conducted by Kassa, Abajobir, and Gedefew (2014), on male involvement on utilization of contraceptives found that 44.7 percent of men supported the use of family planning for their spouse/wives while 19.0 percent of the respondent were neutral to approve use of contraceptives for their wives and 38 percent did not approve use of contraceptives to their partners. The reasons for not approving contraceptives include the demand to have more children, fear of side effects, partner's refusal, religious prohibition, and lack of awareness.

In a study conducted by Bwazi, Maluwa, Chimwaza, and Pindani (2014) on utilization of Postpartum Family Planning Services between Six and Twelve Months of Delivery at Ntchisi District Hospital, Malawi, stated that 46 percent of Husbands assisted the women in form of financial support, 45 percent of husbands also reminded the women about the next appointment dates and some husbands participated in the FP methods by procuring some contraceptive method such as using the male condom.

In a study conducted by Gizaw and Regassa (2011) on family planning utilization services in Mojo town found out that, women who did not want to use family planning methods due to their opposition contributed to only 2.4 percent of non-users and 10.9 percent reported that they faced opposition from husband/partners.

According to a study conducted by AKintade et al. (2011) on Awareness and use of and barriers to family planning services among female university students in Lesotho

found that 55.6 percent had discussed family planning use with their partners before taking part in this study, while 19.7 percent who were in a relationship had never done so. Some of the reasons given for not discussing family planning with the partner included fear of losing the partner or partner unwilling to engage in such discussion.

According to the study conducted by Nalwadda et al. (2010) on Persistent high fertility, young people recount obstacles and enabling factors to use of contraceptives in Uganda, Participants pointed out that lack of power in decision making is a key obstacle to the use of contraceptives. Both men and women reported that women's purpose in marriage is to produce children. The women recounted their partner disapproves and verbal or physical abuse them including violence if they discover that they are using contraceptives.

According to a study conducted by Tengia-Kessey and Rwabudongo (2006) on utilization of modern family planning methods among women of reproductive age in a rural setting: the case of Shinyanga rural district, Tanzania, found out that a quarter of women who reported to discuss with their partners about FP issues used the methods as opposed to three percent of their colleagues who did not engage in such discussions.

According to a study conducted by Batwala et al. (2006) a study on contraceptive uses among in and out-of-school adolescents found that partner refusal contributed to 62.2 percent as compared to 37.8 percent who accepted the use of contraceptives respectively.

2.3.5 Family members/community

According to the study conducted by Cohen et al. (2020), on Behavioral barriers to the use of modern methods of contraception among unmarried youth and adolescents in eastern Senegal. Revealed that the community thinks the unmarried woman who uses family planning is practicing prostitution. One of the participants a father of 5 children reported that if he finds his daughter using family planning he will deprive her of everything. In the same study Contraceptives were seen as a last resort option and used only by youth who are promiscuous, lacks discipline, or unfaithful to their partners. While some young people actively decide not to use contraception, others end up having unprotected sex simply because they have deferred making a decision until it is too late. The study further found out that modern methods of contraception were universally described by the youth and parents as most appropriate or exclusively appropriate for married women with children who would like to space their births. The youths think modern methods other than condoms is their only method of choice in preventing pregnancies.

According to the study conducted by Ouma et al. (2017) on obstacles to family planning use among rural women in Atiak health center IV, Amuru district, northern Uganda, found out that 5 percent said family forbid them from using family planning.

According to study conducted by AKintade et al.(2011) on Awareness and use of and barriers to family planning services among female university students in Lesotho found out that 28.9 percent of respondent pointed that their family supported their use of family planning and 16.4 percent the family did not support the use of family planning.

According to the study conducted by Nalwadda et al. (2010) on Persistent high fertility, young people recount obstacles and enabling factors to use of contraceptives in Uganda, Participants pointed out that Society expects young people to be virgins till marriage and parents' rejects contraceptive use to young unmarried woman. If unmarried daughter gets pregnant, the parents might send her away from home, force her to marry the man responsible for pregnancy, or force her to undergo an abortion.

2.3.6 Taboo of sexual activity

According to Dioubate et al. (2021), a qualitative study on barriers of contraceptives use among adolescents and youth found out that adolescents and youth refrain from discussing such topics with parents (fathers, mothers, sisters) and sometimes with their spouses because they feel that this avoids any suspicion of any sexual activity or life. So discussions about sexuality and contraception are inappropriate with children, so their children should be spared from such discussions to avoid their early exposure to sexuality.

According to the study conducted by Cohen et al. (2020) on Behavioral barriers to the use of modern methods of contraception among unmarried youth and adolescents in eastern Senegal found out that some community such as Kedougou and Tambacounda, consider discussion of sex and contraceptives as taboo. Young people do not discuss use of contraceptives with their partner a head of sex instead prefer to discuss sexual health topics with their friend of the same gender.

2.3.7 Perception on sexual activity

According to Dioubate et al. (2021), a qualitative study on barriers of contraceptives use among adolescents and youth indicated that preservation of the virginity of girls until marriage is an honor for the family and the community. Consequently, it is

inappropriate and “indecent” to engage in conversations about contraceptive methods, they said “the new generation” is in a hurry to initiate sexual activities, so advising use of condoms (for young men) or implants (for women) to avoid pregnancies is necessary although it may have adverse implications.

2.4 Health care setting and organization factors

2.4.1 Accessibility

According to the study conducted by Ouma et al. (2017) on obstacles to family planning use among rural women in Atiak health center IV, Amuru district, northern Uganda found out that Lack of community links to the Centre providing family planning was an obstacle to family planning provision.

The facility-level barriers are also significant hurdles to FP services access such as heavy caseload of deliveries and antenatal and postnatal care consultations, limited space to offer a range of maternal health and FP services and lower-level health facilities limiting FP services to only temporary methods. Coupled with the absence of a functional referral system for the provision of long-term and permanent methods drastically reduces the choices available to women when they visited the health centers (UNFPA, 2020).

2.4.2 Distance to health facility

According to Dioubate et al. (2021) a qualitative study on barriers of contraceptives use among adolescents and youth reported that proximity of health facility influences contraceptive use, some participants preferred to go to a facility in a different neighborhood than their own because they were afraid to meet a family member, acquaintance, or even a doctor that their family frequented.

According to Cohen et al. (2020) a study on Behavioral barriers to the use of modern methods of contraception among unmarried youth and adolescents in eastern

Senegal reported that, the proximity of the facility if not married [could prevent young people from getting contraception], because people will say that the daughter of so and so used family planning even though she isn't married so she had sex outside of marriage.

According to the study conducted by Ouma et al. (2017), on obstacles to family planning use among rural women in Atiak health center IV, Amuru district, northern Uganda, revealed that 32.3 percent women stated that they faced the problem in accessing family planning services since services are located far away from home.

According to Tengia-Kessey and Rwabudongo (2006) a study on utilization of modern family planning methods among women of reproductive age in a rural setting, the case of Shinyanga rural district, Tanzania, found out that 14.7 percent of women residing less than an hour's walk used the methods compared to 11.3 percent and 7.8 percent of their colleagues whose walking distance was 1-2 hours or more.

2.4.3 Quality of services

Absence of health services and trained health care professionals poses a barrier to accessing modern contraceptives methods mainly implants and intrauterine contraceptives (IUCs) which require adequate facilities with infection prevention services, instruments for placement and removals, and commitment and expertise to follow-up women with side-effects, (Lancet global health, 2019).

In a study conducted by Ouma et al. (2017) on obstacles to family planning use among rural women in Atiak health center IV, Amuru district, northern Uganda found out that preferred methods like the injectable, sometimes run out of stock that affects their utilizations.

According to study conducted by AKintade et al. (2011) on Awareness and use of and barriers to family planning services among female university students in Lesotho found out that One-third were very satisfied with the services i.e. 32.5 percent and one-quarter were partially pleased 22.5 percent with health care services.

2.4.4 Availability of preferred methods

A major concern for FP program is a narrow range of services for young people, mostly short-acting FP products and, therefore, limited options open to young clients in most public facilities offering FP services (UNFPA, 2020).

According to the study conducted by Ouma et al. (2017) on obstacles to family planning use among rural women in Atiak health center IV, Amuru district, northern Uganda. Indicated that 14.6 percent of the respondent's reported services were not available for them.

According to Celik (2016), a study on access to contraceptives and users' abilities reported that contraceptive availability in the public health system was reported to be limited, irregular, and unequally distributed throughout the country. Five respondents indicated that the private sector had fewer stock-outs and expiries, as contraceptive counselling opportunities were plenty, and availability of contraceptives was high. However, respondents indicated that out-of-pocket-payments also made the private sector inaccessible to a large part of the population.

Most women 59 per cent who were using a modern method of contraception last obtained from the public sector. 40 per cent obtained their method from a government health center and 39 per cent obtained their method from private sector (UDHS, 2016)

In a study conducted by Abdalla and Ahmmed (2017) on trends in contraceptives in sub-Saharan Africa found out that absence of health services and trained health care professionals poses a barrier to accessing modern contraceptives, mainly implants and intrauterine contraceptives (IUCs) require adequate facilities with infection prevention services, instruments for placement and removals, and commitment and expertise to follow-up women with side-effects.

According to AKintade et al. (2011), a study conducted on Awareness and use of and barriers to family planning services among female university students in Lesotho found out that two-thirds (64.4 percent) of the participants indicated that they could easily access family planning services and 61 percent reported services were always available to them.

2.4.5 Attitudes and perception of health care workers.

A qualitative study on barriers of contraceptives use among adolescents and youth pointed out that attitudes and perception of health care workers especially women, constituted a barrier to the use of contraceptive methods for these “young users,” especially if they were unmarried. The reasons attributed to this were the non-adherence to the concept of the use of contraceptive methods by unmarried people, which is sometimes reinforced by the latter’s religious conviction or belief. In the same study one of the participants reported that their colleagues especially those who work in the public do not buy the idea of these young people using contraceptive methods (referring to adolescents and youth). When a client comes to them (female provider) asking for contraceptives, if it’s young people; they often tell them to study and leave FP and focus on their studies (Dioubate et al, 2021).

2.4.6 Time

According to Dioubate et al. (2021) a qualitative study on barriers of contraceptives use among adolescents and youth stated that the participants prefer to access health facilities in the evenings rather than during the day. The reasons they cited was in the evening they could only find the health care team, and the facility was less frequented by clients. This reduces the risk of meeting a relative or acquaintance on the premises of the facility.

According to Nalwadda et al. (2010), a qualitative study on Persistent high fertility in Uganda: young people recount obstacles and enabling factors to use of contraceptives found out that Limited opening hours, long waiting time, and lack of youth friendly services were barriers to access health services.

Long waiting times and inconvenient clinic hours can prevent clients from obtaining the services they need. In both Malawi and Senegal, clients identified long waiting times as a concern. One client said, "The wait is a big problem. I'll sometimes skip my appointment if I think about the hours I'll have to spend at the center". Some clinics do not post their hours of service, or do not serve clients during certain hours when they are supposed to be open. A study in Kenya found that although clinics were officially open from 8 a.m. to 5 p.m., providers discouraged clients from coming in the afternoons and often did not provide services to women who were only able to attend in the afternoon, (Babirye, 2013).

2.4.7 Privacy and confidentiality

According to Babirye (2013), a study on Uptake and use of modern contraceptives among youths (15-24) at community level in Busia district, Uganda. Reported that Clients feel more comfortable if providers respect their privacy during counseling

sessions, examinations, and procedures. Particularly those who obtain services in secret report higher satisfaction with providers who keep their needs and personal information confidential. Lack of privacy can violate women's sense of modesty and make it more difficult for them to participate actively in selecting a contraceptive method.

2.4.8 Policies

Uganda committed to universal access to family planning in order to reduce unmet need for family planning from 40 percent to 10 percent in 2022. It also committed to increase the annual government allocation for family planning supplies from US \$3.3 million to US \$5 million annually for five consecutive years, (UNFPA, 2020).

One unified country strategy for family planning is the Uganda Family Planning Costed Implementation Plan, 2015-2020 (FP-CIP), put in place and under review that articulates Uganda's consensus-driven priorities for family planning and gives critical direction to Uganda's FP programme. Forty-six districts have respective District Family Planning Costed Implementation Plans to guide family planning mainstreaming in district planning and budgeting processes.

According to Namasivayam, Lovell, Namutamba, and Schluter (2020), a study on, Predictors of modern contraceptive use among women and men in Uganda, pointed that the government has enlisted different strategies including the provision of integrated family planning services in all health facilities and procurement and distribution of contraceptives to men and women of reproductive age.

Uganda's liberal family planning policy, which states that all sexually active men and women should have access to contraceptives without need for consent from partner or parent, contraceptive use remains low, one of the lowest in the world.

Awareness of contraceptives is almost universal, with 97.5 percent of people in reproductive age being able to identify at least one contraceptive method. But only eight percent of married women aged 15-19 and sixteen percent of those aged 20-24 use modern contraceptive methods. Five percent of married youth aged 15-24 rely on traditional methods (Nalwadda et al, 2010).

2.5.0 Conclusion

The literature review has identified what is known, Education especially finishing secondary, tertiary and university contributes to contraceptives use and eventually reduces the fertility rate as compared to those who never went to school, Rumours/beliefs about family planning especially implants can disappear from the body deter young women from using modern contraceptives, Side effects such as fatigue, menstrual disorders (excessive bleeding and amenorrhea), cancer and infertility act as a barriers to modern contraceptives, Women belonging to middle class are most likely to use modern contraceptives as compared to the poorest wealth index, religion such as Muslim and catholic are against use of modern contraceptives, religious leaders believe people should go out and multiply, contraceptive is killing and children are blessing and lastly Quality of services such as presence of skilled health workers, availability of preferred methods, privacy and confidentiality play a role in using modern contraceptives.

2.5.1 Research gaps

Little is known about the factors such as marital status, culture, partners influence, family/community member influence, perception of sexual activities and policies related to contraceptives and this study tend to address this areas.

Chapter 3

3.0 RESEARCH METHODOLOGY

3.1 Introduction

This chapter/section provided a description of how the study was conducted. It covered the following areas, study design, study area, study population, inclusion criteria, exclusion criteria, sample size determination, sampling, study variables, data collection tool, data collection procedure, Quality/Error control, Data processing and analysis, ethical consideration and study limitation.

3.2 Study Design

The study used a cross-sectional design with mixed method of quantitative and qualitative approaches co-currently. The reason of using cross-sectional design is to measure the exposure and outcome variables at the same time, secondly its relatively quick and inexpensive, and findings can be used to create an in-depth research study. The purpose of using mixed methods was both qualitative and quantitative research in combination provides a better understanding of a research problem or issue other than using one research approach, as such the advantage of quantitative approaches covers up the disadvantages of qualitative approaches and the reverse is true. The mixed methods used questionnaires and interview guide.

3.3 Study Area/ Setting

The study was conducted in Moyo district which is one of the districts in the Republic of Uganda located in West Nile region. It is bordered by South Sudan in the North, Obongi in the South, Adjumani in the East, and Yumbe in the West. The district covers a total land area of 1,114 km². Administratively, it has 07 sub-counties with 03 town councils, 47 parishes, and 225 villages, (Moyo District Planner office).

According to the Population and Housing Census that was conducted in August 2014, Moyo District total population in 2021 is projected to be 118,008. Of which 58,019 are males and 59,988 are females. The total number of households is 23,602 and the average household size is 5. The majority of the inhabitants belong to Madi ethnic group, with small proportions of other ethnic origins. The major occupations range from peasant, trading to civil service. The district has one government hospital, one health center four, nine health centers three and seventeen health centers two, and many private clinics and drug shops. Most of the health institutions provides modern family planning services except (health Centre four Moyo mission and Metu Fr Bilbao Memorial health center two) for the catholic mission.

3.4.0 Study Population

The study looked at married and unmarried females aged 15 to 24 years.

3.4.1 Inclusion Criteria

- Females Aged 15-24 years who accepted to obtain valid information.
- Females aged 15-24 years with valid signed consent form, the rational is to protect both participants and researcher in regards to legal issues.
- Resident of selected villages to avoid biasness in the selection procedure.

3.4.2 Exclusion Criteria.

- Females aged 15-24 years who were critically ill, unable to talk or hear during the study were excluded because they may be unable to give clear information when physical and phycological unwell.
- Visitors to the study area at the time of data collection to avoid making conclusion to research participants with different geographical location and behavior.

3.5.0 Sample Size determinations

The study adopted Slovin's Formula which was formulated in 1960s to determine the sample size, the rationale for use of this formula was because there is no idea about the population behavior.

$$n = \frac{N}{1 + Ne^2}$$

Where, N=target Population

n=Sample size

e=Error term-level of significance (e=5%=0.05)

Females aged 15 to 24 years is 12358 in Moyo district. (Population and Housing Census that was conducted in August 2014 projected to 2021)

$$n = \frac{N}{1 + Ne^2}$$

Therefore, n = 12358

$$1 + (12358(0.05*0.05))$$

$$n = \frac{\underline{12358}}$$

$$1 + (12358*0.0025)$$

$$n = \underline{12358}$$

$$31.89 = 386 \text{ Participants}$$

Additional 10% allowance (non-response) for incomplete questionnaire and refusal to participate in the study was considered. Thus, 386 + 37 = 423 was the sample size. For qualitative data; an In-depth interview was conducted among females aged 15-24 years until saturation point was attained.

3.5.1 Sampling

The study used multistage sampling to draw 423 subjects to be enrolled in the study using simple random and systematic sampling techniques to ensure that the sample

is representative of the entire population and was given an equal chance of participation in the study. "A simple random sample is a sample in which every member of the population has an equal chance of being chosen." and "In systematic sampling, involves choosing your sample based on a regular interval, rather than a fully random selection. It can also be used when you don't have a complete list of the population (Lauren Thomas,2023)

A total of 6 sub-counties/Town councils was selected from the district, 12 Parishes were selected from six sub-counties with each sub-county had 2 parishes, 36 villages were selected from 12 parishes and from each parish 3 villages were selected, and 12 participants in a household level were selected in the village. A Village with a small household of the study population, the next village with the highest population was considered to get the desired sample size of the participants.

To select the six sub-counties/Town councils, all the names of sub-counties/town councils in the district were written on a piece of paper folded and put in a transparent bucket, and randomly picked without replacement until the six sub-counties/Town councils were obtained. The same process was applied to Parishes and Villages to get the selected parishes and villages respectively. For the household in the village, a systematic sampling method was used where a list of all households with females aged 15-24 years were obtained from the village local council chairperson. The total number was divided by the desired number (12) to get the interval and one respondent female aged 15-24 years was randomly selected for the interview from selected households and follows the interval until the desired number was interviewed. In a situation where there was more than one eligible female age 15-24 years' respondent in the randomized household, a lottery method was used to pick a respondent for an interview. However, where there were no eligible

respondents in the selected household at the time of visit the next household was selected from the same village.

Qualitative data A purposive homogeneous sampling method was used to select the female aged 15-24 years for the key informant's interview guide. According to (Kelly, 2010), purposive sampling is 'used to select respondents that are most likely to yield appropriate and useful information', the rationale was it's good for small defined populations with life experiences, traits, and backgrounds in contraceptives to achieve the desired outcomes.

3.6 Study Variables

The variables were categorized into dependent and independent variables.

Dependent variables Utilizations of modern contraceptives: The **Independent Variables** **Social demography:** Age, education, occupation, religion and residence **Individual factors:** Desire for children, Marital status, Knowledge, Fear of side effects, Stigma, rumors, income, and cost. **Socio-cultural factors** religion, culture, residence, Partners influence, family/community influence, and perception of sexual activity. **Health care setting/organization factors,** Availability of preferred methods, Distance to a facility, attitude of health workers, long waiting time, policies, privacy, and confidentiality.

3.7.0 Data collection tool

3.7.1 Quantitative Data collection tool

The study used semi structured questionnaires to collect quantitative data. The reason of using questionnaire is it's a standardized tool which enhanced reliability by minimizing chances of error in data collection exercise. The quantitative tool was structured to collect information on Demographic data, individual barriers, social -

cultural and health care/ organization barriers to contraceptives. The questionnaires were administered by research assistant in both English and Madi local language based on client's preference. The questions were translated to local language for those who cannot understand English. A database was created and the questionnaires were entered in it.

3.7.2 Qualitative data collection tool

A structured Key interview guide for an in-depth interview was used by the research assistant who had experience in collecting qualitative data. The rationale was socio-cultural issues are well understood through a conversation and interactions with participants.

3.8.0 Procedure for data collection

3.8.1 Quantitative data collection procedure

A structured questionnaire that incorporated all the variables was used, Informed consent was sorted, Questionnaires were completed at the household level where there was an eligible participant, the research assistants made a clarification in areas of concern to the participants during the process and completed filled questionnaire was submitted to the researcher on daily basis for verification.

3.8.2 Qualitative data collection procedure

Females aged 15-24 years who were interactive with life experiences, traits and background with modern contraceptive use during the quantitative data collection process were selected to participate for an in-depth interview, Oral consent was sorted to participate and record audio and the interview was completed in a quiet environment that lasted for about 20-30 minutes. Research assistant took notes and recorded audios during the interview process.

3.9 Quality /Error Control

The researcher pre-tested the questionnaire with participants who did not belong to the sub-county selected for the validity of the tool. The researcher made adjustments and eliminated vague questions in line with objectives before using it. A two-day training was organized for the research assistant on the research process such as record taking, audio recording, and research ethics prior to the beginning of the data collection process. All filled questionnaires were reviewed by Principal Investigator for consistency and participants whose questionnaires were incomplete dropped out during data cleanliness.

3.10.0 DATA PROCESSING AND ANALYSIS

3.10.1 Quantitative data processing and Analysis

The researcher cross-checked the filled questionnaire on daily basis, coded the questionnaires, cleaned for consistency and completeness and kept safely in a locked cupboard. A database was created in the computer with a password. Data were entered directly to database created and analyzed using software (SPSS V 20.0), The data were analyzed based on the responses to the questions, descriptive statistics was used for the calculation of frequencies and distribution of each variable and the results were presented in form of graphs, tables, and pie-charts. Logistic regression analysis was used to determine the factors (Barrier) associated with contraceptive use. A bi-variant analysis was done to determine the variables that were to be included in the multivariate analysis, any variable with a P-value of less than 0.2 was included in the multivariate analysis and also all those factors that literature shown to be having influence on the contraceptive were also included in the multivariate analysis. In the multivariate analysis, backward stepwise method was used, where the variable most non-significant p-value was dropped after testing

for confounding and any variable found to be confounded with a percentage difference of Crude and adjusted odd ratio of 10% or more was considered a confounder and included in the multivariate analysis. All those variables with a P-value of less than ($P\text{-value} > 0.05$) were considered significant.

3.10.2 Qualitative data processing and Analysis

The written notes were read and audio listen several times by the researcher, the audio recorded in the local language were translated to English, the written notes were triangulated with audio and the data were transcribed to Microsoft word document, saved in text form and analyzed using open code software. Content analysis was used, and the text were interpreted and systematically classified, coded and themes identified. Themes and sub-themes were formed in line with the study objectives. Descriptive summaries and quotes were made.

3.11.0 Ethical considerations

3.11.1 Approvals:

The researcher sought permission from Uganda Christian university (UCU) research Ethics committee (REC) for review and approval of research proposal and obtained formal introduction letter from the institution before the researcher proceeded to the field.

Permission to conduct the study was sought from Moyo district health officer. This included an explanation of the details of the study and a plan for obtaining participants' consent. A consent form was drafted for the participants to sign as proof for informed consent before data collection.

3.11.2 Informed formal consent:

Participants were informed about the study, how it runs, risks and potential benefits that maybe involved, responsibilities of different people involved and

confidentiality. The researcher obtained voluntarily consent of the participants who are above 18 years and for those who were below 18 years the Assent form was signed by their parents or caretaker before enrolling them in the study. A signature was obtained and those who cannot write a stamp pad was provided to obtain a thumbprint.

3.11.3 Confidentiality

Names of participants was not used to label data. Instead, participant codes were assigned to each participant and the data were kept under lock and key cupboard to avoid access by unauthorized people. Details of participants were not exposed during research process.

3.11.4 Benefits and compensation

Participants were informed that there are no direct benefits in terms of monetary or kind assistance, however the study aims to contribute towards advancement in science, their participation in decision making, exercise their autonomy and take an active role in society.

3.11.5 Risks

To minimize risk of harm to participants, the following was observed, obtaining of informed consent, ensured secrecy and privacy, avoided misleading information, Voluntarism and withdrawal from the study.

Chapter 4 PRESENTATION OF FINDINGS

Introduction

This chapter presented the findings of Demographic Characteristics, individual barriers, Socio-cultural and Health care/Institutional barriers.

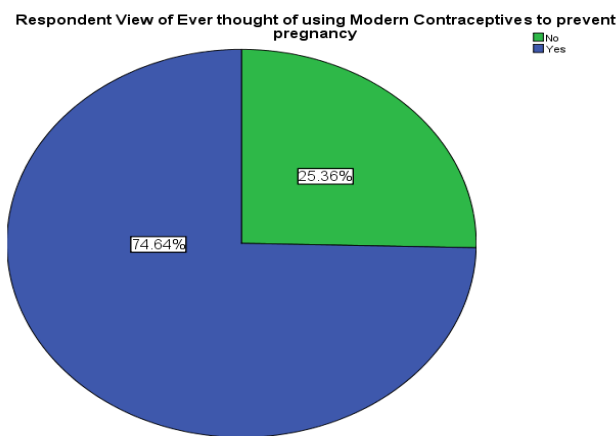
A total of 423 participants were sampled. Nine were excluded due to error in data collection leaving 414 participants for analysis as shown below.

Table 1: Distribution of Socio-demographic Characteristic of respondent, n=414

Characteristics	Frequency (n)	Percentage (%)
Age		
15-19 years	146	35.3
20-24 years	268	64.7
Residence		
Rural	279	67.4
Urban	135	32.6
Religion		
Catholic	332	80.2
Protestant	19	4.6
Muslim	32	7.7
Born again	31	7.5
Education Level		
Never been to school	70	16.9
Primary completed	263	63.5
Secondary completed	68	16.4
Post-Secondary (Cert,Diploma and Degree)	13	3.1
Marital Status		
Single	143	34.5
Married	234	56.5
Separated	37	8.9
Employment status		
Not employed	292	70.5
Formally employed	14	3.4
Business	108	26.1
Number of children (Parity)		
No Child	170	41.1
One child	129	31.2
Two children	84	19.8
Three and above	33	8.0

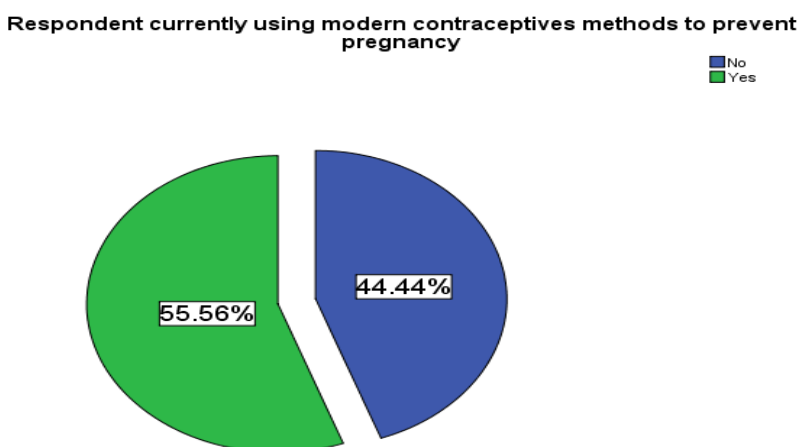
Majority of the respondents 64.7% are in the age group of 20-24 years,80.2% were catholic and 4.6% protestant, 63.5% completed primary and 3.1% Post-secondary education, 70.5% not employed and 3.4% formally employed and 41.1% had no child and 8.0% had three or more children.

Figure 2: Distribution of response to question “Have you ever thought of using Modern Contraceptives to prevent pregnancy?” n=414



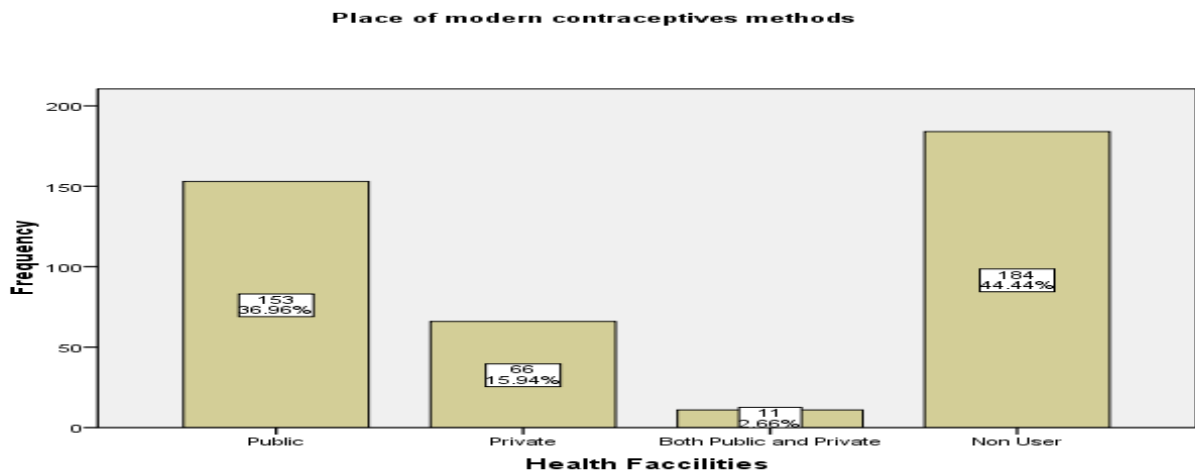
Majority of the respondents 74.6% have ever thought of using modern contraceptives and 25.4 % never thought of using modern contraceptives.

Figure3: Distribution of response to question “Have you ever used or currently using Modern contraceptives methods to prevent pregnancy?” n=414



Majority of the respondents 55.6% have used or currently using modern contraceptives and 44.4 % did not used any method of modern contraceptives.

Figure 4: Distribution of response to question “Where do you access Modern contraceptives?” n=414



Majority of the respondents 153(37%) access modern contraceptives in public facilities and a few 11(2.7%) access both in public and private facilities.

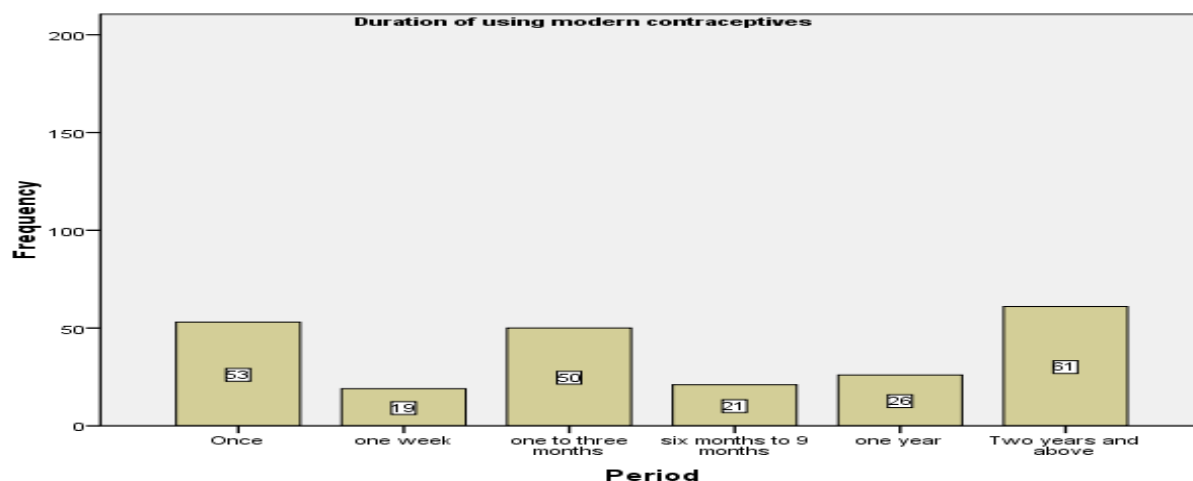
Table 2: Distribution of response to question “what methods have you ever used or currently using to prevent pregnancy?” n=230

Characteristics		Frequency (n)	Percentage (%)
Condom	Yes	141	61.3
	No	89	38.7
Pills	Yes	18	7.8
	No	212	92.2
Injectable	Yes	56	24.3
	No	174	75.7
Implants	Yes	43	18.7
	No	187	81.3
IUDs	Yes	1	0.4
	No	229	99.6
Diaphragm	Yes	2	0.9
	No	228	99.1
Spermicides	Yes	0	0.0
	No	230	100
Female sterilizations	Yes	0	0.0
	No	230	100
Vasectomy	Yes	0	0.0
	No	230	100
Emergency pills	Yes	24	10.4
	No	206	89.6

“Non categorical responses, where one respondent may give more than one answer or Used more than one methods”

Majority of respondents 61.3% have used condoms and No clients used Patches spermicides, female sterilization and Vasectomy.

Figure 5: Distribution of response to question “How long have you used modern contraceptives methods?”, n=230



Among the uses, majority of the respondents 61(26.6%) used modern contraceptives for two years and above and a few 19 (8.3%) used for one week.

Table 3: Distribution of response to question “What Individual barriers prevent you from using modern contraceptives?” n=230

Characteristics		Frequency (n)	Percentage (%)
Desire to have children	Yes	69	30
	No	161	70
Fear of side effects	Yes	169	73.5
	No	61	26.5
Cost	Yes	3	1.3
	No	227	98.7
Rumors	Yes	120	52.2
	No	110	47.8
Stigma	Yes	6	2.6
	No	224	97.4
Marital Status	Yes	49	21.3
	No	181	78.7

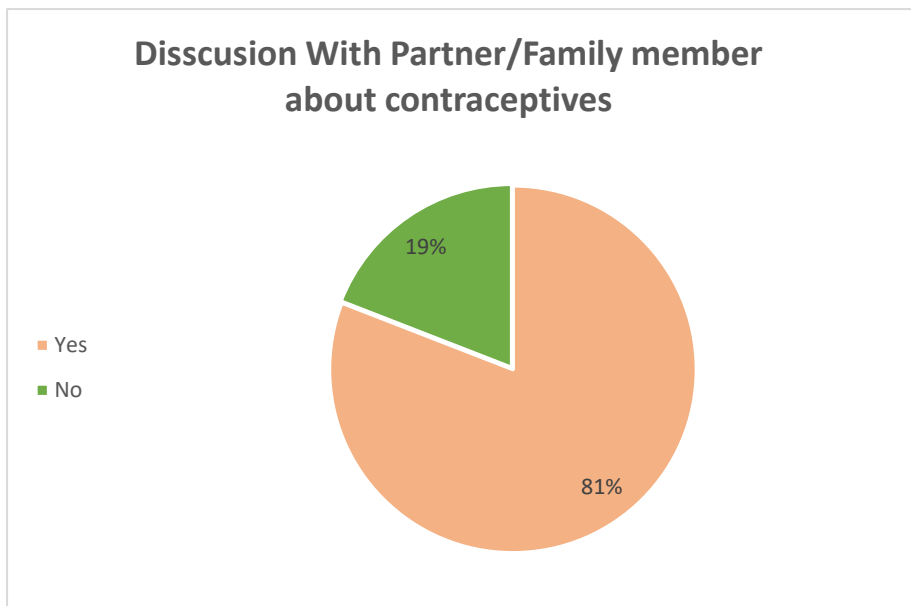
Majority of the respondents 169(73.5%) have fear of side-effects and a few 3(1.3%) have cost as individual barriers.

Table 4: Distribution of response to question, “What Socio-Cultural barriers do you face in using modern contraceptives?” n=230

Characteristics		Frequency (n)	Percentage (%)
Religious influence	Yes	24	10.4
	No	206	89.6
Cultural influence	Yes	49	21.3
	No	181	78.7
Residence in the rural area	Yes	10	4.8
	No	219	95.2
Partners refusal	Yes	92	40
	No	138	60
Family member/community influence	Yes	107	46.5
	No	123	53.5
Perception of sexual immorality	Yes	40	17.4
	No	190	82.6

Majority of the respondents 46.5 % had family/community influence and a few 4.8 % had residence from rural settings.

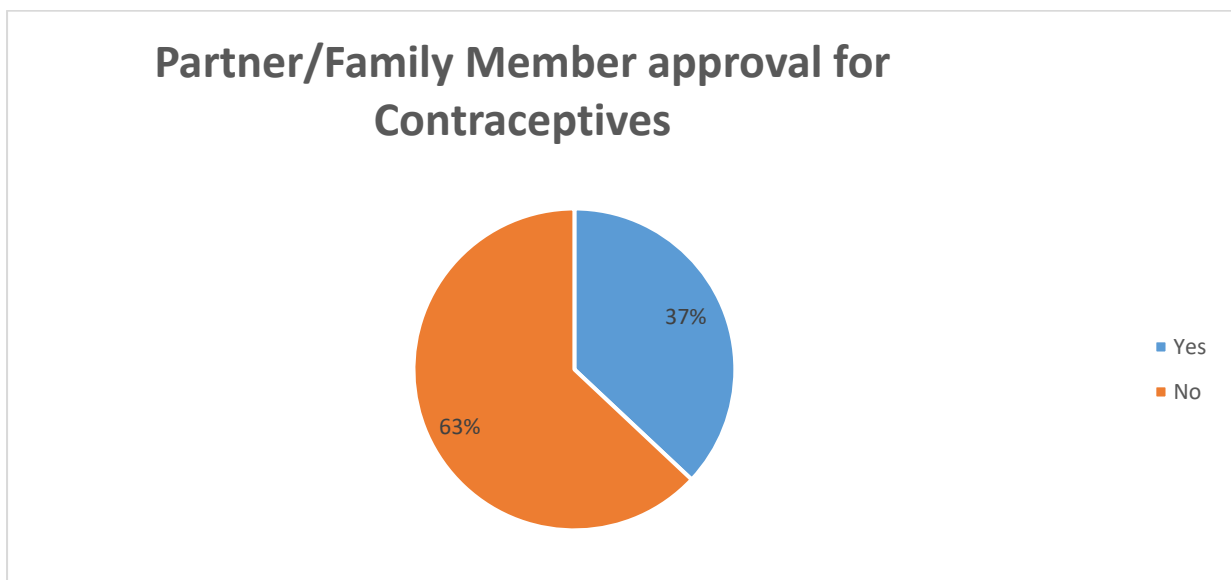
Figure 6: Distribution of response to question, “Do you discuss with your Partner/Family member about the use of Modern contraceptives?” n=230



Majority of the respondents 81.0% discuss with partner/family member about the use of modern contraceptives

and 19.0 % do not discuss about use of modern contraceptives.

Figure 7: Distribution of response to question, “Does your partner/Family member approve the use of Modern contraceptives?” n=230



Majority of the respondents 145(63%) partner/family member does not approve the use of modern contraceptives and 85(37%) approve the use of modern contraceptives.

Table 5: Distribution of response to question, what are the reasons why your partner/family member refuses you from using modern contraceptives?” n=230

Characteristics	Frequency (Yes=n)	Percentage (%)
Desire to have more children	49	21.3
Rumors of infertility	82	35.6
Rumors of cancer	45	19.5
Feeling of sexual pleasure	6	2.6
Side effects	42	18.2
Others (Still in school, need to control pregnancy naturally)	6	2.6

Majority of the respondents 35.6 % have rumors of infertility and a few 2.6 % mentioned others such as still in school, feeling sexual pleasure and desire to control pregnancy naturally.

Table 6: Distribution of response to question, “What health care setting/institutions barriers do you face in using modern contraceptives?” n=230

Characteristics		Frequency (n)	Percentage (%)
Distance is far	Yes	35	14.2
	No	195	84.8
Distance is too close	Yes	62	37
	No	168	73
Attitudes of providers/health workers	Yes	29	12.6
	No	201	87.4
long waiting time	Yes	60	26.1
	No	170	73.9
Absence of preferred methods	Yes	21	9.1
	No	209	90.9
Privacy and confidentiality	Yes	21	9.1
	No	209	90.9
Policies are not friendly	Yes	15	6.5
	No	215	93.5

Majority of the respondents 37 % Distance is close and a few 6.5 % mentioned polices are not friendly.

Analysis for association

Table 7: Bivariate analysis of individual, socio-cultural and health care barriers

Barriers	Variables	OR (Exp(B))	P-value	95% CI for Exp (B)
Individual	Desire to have children	0.669	0.078	(0.428 - 1.046)
	Fear of Side effects	0.561	0.007	(0.370 - 0.851)
	Cost	0.413	0.446	(0.043 - 4.008)
	Rumors	1.091	0.660	(0.740 - 1.610)
	Stigma	1.920	0.224	(0.671 - 5.496)
	Marital status	2.599	0.000	(1.689 - 4.000)
Social-Cultural	Religion	1.226	0.511	(0.668 - 2.252)
	Culture influence	1.494	0.079	(0.954 - 2.341)
	Residence -Rural	0.787	0.628	(0.299 - 2.073)
	Partner refusal	0.781	0.229	(0.522 - 1.168)
	Family/community influence	1.528	0.033	(1.034 - 2.257)
	Perception of sexual immorality	1.362	0.213	(0.837 - 2.216)
Health care	Distance Far	1.234	0.882	(0.077- 19.88)
	Close	0.907	0.733	(0.520 - 1.585)
	Attitudes of health care worker	0.941	0.841	(0.521- 1.701)
	Long waiting time	0.509	0.008	(0.309- 0.837)
	Absence of Preferred Methods	0.820	0.581	(0.405- 1.660)
	Confidentiality	0.757	0.448	(0.368- 1.556)
Contraceptives policies	1.748	0.118	(0.868- 3.519)	

Significant Level of P-value at 0.2

Individual barriers: Desire to have children, fear of side effect, stigma and marital status are significant at p-value of 0.2, hence were included in the multi-variate analysis. while rumors was not significant at p-value of 0.2, However literature has shown rumors and cost to be a barrier and was included in the multivariate analysis.

Socio-cultural barriers: Partner refusal, Family/community influence, cultural influence and perception of sexual immorality are significant at a P-value of 0.2. were considered for multivariate analysis.

Health care/institutional barriers: factors such as long waiting time and policies are significant at a P-value of 0.2. Distance was not significant; however, literature has shown to be a barrier to contraceptives and was included in the multivariate analysis.

Table 8: Multivariate analysis for factors associated

Barriers	Variables	OR Exp(B)	P-value	95% CI for Exp (B)	
				Lower	Upper
Individual	Desire for children	0.459	0.002	0.279	0.756
	Marital status	3.193	0.000	2.002	5.091
Social-Cultural	Cultural influence	2.004	0.006	1.218	3.298
	Family/community influence	1.644	0.019	1.084	2.493
Health care/institution	Long waiting time	0.442	0.003	0.258	0.756

The factors that remained significant at multivariate analysis included; Desire for children, marital status, cultural influence, Family/community influence and long waiting time. The factors that were dropped after testing for confounders included Fear of side effects, cost, rumors, stigma, Partner refusal, Perception of sexual immorality, Distance and contraceptives policies.

QUALITATIVE RESULTS

Table 9: Distribution of characteristics of 23 Participants selected for KII

S/N	Study ID #	Age	# HH	Village	Residence
1	001	21	78	Fodia East	Rural
2	002	23	44	Fodia West	Rural
3	003	20	98	Afoji	Rural
4	004	22	124	Minze West	Rural
5	005	21	23	Kolokolo	Rural
6	006	24	98	Cohwe	Rural
7	007	22	68 (1)	Egule	Rural
8	008	21	40 (2)	Egule	Rural
9	009	19	73	Diri	Rural
10	010	23	98	Logili	Rural
11	011	22	110	Masaloe East	Rural
12	012	20	07	Abeso	Rural
13	013	21	210	Celecelea East	Urban
14	014	20	135	Central 1	Urban
15	015	21	57	Central 2	Urban
16	016	22	29	Cinyi West	Rural

17	017	23	62	Cinyi East	Rural
18	018	24	34	Paloburi	Rural
19	019	19	64	Edre	Urban
20	020	24	39	Idijo	Urban
21	021	23	67	Khidi	Urban
22	022	21	47	Ubbi-South	Urban
23	023	20	35	Utuno	Urban

Can you tell me about the individual barriers that affect the utilization of modern contraceptives in your area?

The respondents mentioned Fear of not bearing children (Infertility), side effects (over bleeding, abdominal pain, abnormal birth, weakness, alteration of periods, Disease e.g cancer, infections), Denial by partner, stigma, rumors (Implants can disappear), unmarried are not suppose to use FP, fear of family breakup, cost.

A mother of two children in a rural setting was quoted as, “I have fear for FP because of rumors, second the father of my children does not accept it and thirdly the methods such as oral or injectable are for buying and I don’t have money”. (ID Number 012)

Another mother from urban setting said, “my personnel challenges I get is over bleeding for example my periods used to last for 3 days, this drug push it for a week or two weeks, sometimes I experience headache even if you check for malaria or typhoid they don’t get, and thirdly it makes it difficult for you to perform heavy work because you get tired easily and heavy bleeding make it difficult”. (ID Number 013)

“I used family planning in a hidden way because the father of my children does not allow me to use it because of rumors about FP, but because I know it does not cause harm, I continue to go for it without his knowledge”. (ID Number 014)

Another client said, “I have knowledge and ever used modern contraceptives, but my challenge I get from FP is the period stays for long duration, I used to see my periods for 3 days and 4th day it gets finished but now it last for a week, it has made me to lose weight, become weak and experience headache”. (ID Number 015)

“The challenge I get from using FP is my period has become irregular, I experience abdominal pain, and it has caused infection to my womb”. (ID Number 016)

Can you tell me about the socio-cultural obstacles that affect the utilization of modern contraceptives in your area?

The respondents cited partners'/family disapproval, religion discourage FP e.g. catholic, Muslim (encourage natural FP, people should multiply), culture denies (encourage natural FP), perception of sexual immorality deter young people,

"I discuss FP with my husband but he refuses me to use it, but I went ahead to use without his knowledge and when I started experiencing side effects it brought miss understanding at home and he said he does not want anyone using FP at his home". (ID Number 015)

"Once you are young woman and you use modern contraceptives or involve in open discussion about modern contraceptives, community members believe that you are against the culture they encourage use of traditional or natural methods". (ID Number 003).

"I have not gone for family planning because I hear people say your period will last for long time and you will fail to conceive when you need a child". (ID Number 004)

Another respondent was quoted saying, "Once you are married and you use contraceptives, family/community members believe that you are prostitute and you don't want to bear children".(ID Number 018)

"The socio-cultural issues in the community is it brings miss-understanding with husband, elders in the community, father or mother in-laws if they learnt that you are using FP, religion also does not allow and believes God has blessed us to multiply and finish the eggs you have, so the religion talks negative about FP methods". (ID Number 006)

"Religion such as Muslim does not allow you to use FP, so if you go for it, they will say the husband should divorce with you because you are prostitute and cheating on your partner". (ID Number 009)

What do you think are the health care/institution factors that affect the community from utilizing modern contraceptives?

The respondents mentioned absence of stock, discouragement by fellow clients, delay at health facility, privacy and confidentiality by service providers, consent from spouse, attitude of service providers e.g. nurses (are not friendly), absence of service providers, inadequate information,

One of the respondent was quoted, “The challenges I get from health facility is the nurses shout on people and when you inject FP, they don’t tell you when it will expire, they waste your time a lot even if people are few they don’t take initiative to serve people very fast”. (ID Number 016)

“The challenge we experience is a delay in waiting time because people are many at health facility but also at grade 2 health Centre, they only have injectable and oral pills methods, other methods of your choice like implants are not available”. (ID Number 006)

“The challenge at health facility is stock out of preferred choice, sometimes if you want for one year they say it is over we have for three months, they tell you to go back and give next appointment when they expect the methods will be available”. (ID Number 020).

“The challenge at health facility is sometimes you don’t find service providers and they shout on people when you need help from them”. (ID Number 021)

“We face a lot of challenges, they tell you to come with your husband, shout on you that make you fear to go to hospital and the health worker failed to provide for me adequate information about the side effect (Over bleeding) that I experienced while using FP this discouraged me to continue using FP”. (ID Number 022).

The challenge at health facility is stock out of preferred methods when you visit but the good thing is they give you appointment when they expect the methods to be available, secondly the nurses are not polite, they talk as if they were annoyed before they don’t talk friendly and that makes you fear and will make you go back and not return for the services”. (ID Number 012)

Chapter 5

DISCUSSION OF RESULTS

5.1 Introduction

The study employed a mixed design both quantitative and qualitative methods were used to determine the barriers associated with utilization of modern contraceptives. The findings of quantitative methods were triangulated with qualitative methods.

5.2 Individual barriers to utilization of modern contraceptives.

The study indicated Desire for children tend to be not associated with use of modern contraceptives with 30 % (95% CI: 0.279-0.756), P-Value of 0.002 and OR of 0.456 which is significant, this implies that young women have 0.5 times lower chances of not utilizing modern contraceptives. The reasons could be probably females with one child or two have more interest in children and they can stop the family planning anytime they want so this does not affect the use of modern contraceptives. This finding agreed with UDHS 2016 report, which indicated women with one child have 4% chances of using contraceptives and will want to have an average family size of 4.0 children. The more children a woman already has, the more likely she may not want more children and is likely to use contraceptives.

Similarly, Marital status was statistically significant with 21.3 % (95% CI: 2.002-5.091), P-Value of 0.000 and OR of 3.193 which mean there is 3.2 times higher chances of not using contraceptives when married, this may be because, married women will want to have at least three to four children or above and start spacing children and limit the number due to responsibilities that come with childbearing. The quantitative is in line with qualitative study where **1D 018** was quoted “Once

you are married and you use contraceptives, family/community members believe that you are prostitute and you don't want to bear children". This study is different with study conducted by Cohen et al 2020, where Unmarried young people see modern methods of contraception as inappropriate for people like them and described by the youth as most appropriate or exclusively appropriate for married women with children who would like to space their births.

5.3 Social-cultural barriers to utilization of modern contraceptives.

The study has shown cultural influence tend to be a barrier to utilization of modern contraceptives with 21.3%, (95% CI: 1.218-3.298), P-Value of 0.006 and OR of 2.004 which is significant. This means there is 2 times higher chances of not using modern contraceptives due to the fact that the culture does not openly allow discussion about sexuality related issues with females and hence majority end relying on traditional or natural methods, this findings is in line with qualitative findings where one of the respondent was quoted saying *"Once you are young woman and you use modern contraceptives or involve in open discussion about modern contraceptives, community members believe that you are against the culture they encourage use of traditional or natural methods "*. (ID Number 003), These findings is in line with Dioubate et al. 2021, which found out that adolescents and youth refrain from discussing such topics with parents (fathers, mothers, sisters) and sometimes with their spouses because they feel that this avoids any suspicion of any sexual activity or life. The same findings was reported by UDHS (2016), where there is limited cultural space to discuss sexuality between parents/guardians and children, which means that young people are often left to seek information on sexuality matters on their own or to experiment with sex, and hence, engage in risky sexual behavior.

The study showed family/community influence tend to be a barrier to utilization of modern contraceptives with 46.5 % (95% CI: 1.084-2.493), P-Value of 0.019 and OR of 1.644 which is significant. This implies that family/community influence contributed to 1.6 times higher chances of not utilizing modern contraceptives. The reason is perhaps because in African settings family/community members such as elders and in-laws beliefs in collectivism culture where decision is based on what is good for the community and rights of families and communities come first before individual rights, therefore family/community members are concern and influential about what define themselves as a group, this quantitative study is in agreement with qualitative findings where participants ID 006 reported that *“family/community members such as elders, in-laws brings miss-understanding when they find out that women are using modern contraceptive”*. However, this study is different from the study conducted by Ouma-et-al (2017), which found out that 5% said family forbid the use of family planning. The difference in barriers to utilization could be that the study in Atiak health centre IV was only confined to health facility with limited geographical catchment area that restricted participation of those who cannot come to the health facility unlike the one in Moyo which was carried in the whole district and involve moving to household level.

5.4 Health care/Organization barriers to utilization of modern contraceptives.

The study showed long waiting time tend to have no influence on utilization of modern contraceptives with 26.1% (95% CI: 0.258-0.756), P-Value 0.003 and OR of 0.442 which is significant. This implies that OR 0.4 times lower chances of not utilizing modern contraceptives, this finding is probable due to the fact that some users are formally employed or doing business and they can access contraceptives in

private setting where there is no waiting time or crowding as compared to majority who access it in the public facilities hence reduces the congestion in public facilities. In qualitative study participant ID 016 was quoted, *“Sometimes people are few but nurses don’t take initiative to serve people very fast”*, this study is different from study conducted by Nalwadda et al (2010) on persistent high fertility in south central part of Uganda, which found out that limited opening hours and long waiting time is a health care barrier to modern contraceptives.

5.5 Study limitations

- 1) There was possibility of recall bias as some participants did not remember exactly the type and duration of contraceptive used, this was minimized by conducting interview in a convenient environment with privacy and allowing adequate time for them to recall the modern contraceptives used during the data collection process.
- 2) Partner to one of the Participants confronted the research assistant for not obtaining consent from him as a family head, this was resolved by excluding the household as this not one of the ethical considerations to get permission from husband.
- 3) Delay in collecting qualitative data since some business women were busy and kept postponing the interview process, The Research assistant kept rescheduling convenient times for the client.

Chapter Six: CONCLUSION AND RECOMMENDATIONS

6.1 Conclusion

The study findings disclosed that 55.6% have used modern contraceptives and 44.4% did not use, the most common methods of modern contraceptive used by females aged 15-24 years was 61.3% condom and no clients mentioned patches, spermicides, female sterilization and vasectomy, Among the users 26.6% used it for a period of 2 years and 8.3% used for a period between one week. Accessibility of this methods was mainly 37 % in public facility as compared with 2.7% both public and private setting. 63.0% of partner/family members does not approve the use of modern contraceptives and among the users the reasons they mentioned for disapproval was mainly 35.6% cited rumors that modern contraceptives can cause infertility.

Marital status, Cultural influence and Family/community influence was found to be associated with barriers to utilization of modern contraceptives. Desire to have children and long waiting time tends to be not associated with use of modern contraceptives among young women.

In nutshell the findings of this study have shown both individual and socio-cultural factors contribute to low utilization of modern contraceptives among females aged 15-24 years and these needs to be address with involvement of different stakeholders.

6.2 Recommendations.

1. MOH should reinforce Community engagement program or advocate through local leaders such as Politicians, opinion leaders, religious leaders and cultural leaders to address cultural issues and break family/community

member's chain on collectivism cultures and focus on individualism culture to address the rights and needs of young women who are willing to use modern contraceptives.

2. The District Health Officer should scale up the sensitization awareness program, through radio talk show, community meetings or events and empower health workers and VHTs to increase the uptake among non-users and other methods that are under-utilized or not used at all.
3. The District to conduct outreach/mobile clinic program to the community to increase the uptake especially targeting the non-users and also take various methods that may not be available in lower health facility settings.
4. There is a need for research since little is known about policies related to modern contraceptives.

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Appendix 1 Work Plan/Timeline

Research Work Plan																				
S/N	Activities	Period																		
		2021					2022												2023	
		Aug	Sept	Oct	Nov	Dec	Jan	Feb	March	April	May	June	July	Aug	Sept	Oct	Nov	Dec	JAN	FEB
1	Identification of Topic	█																		
2	Discussing of research Topics with Peers																			
3	Fine Tuning of research Topics																			
4	Submission of Resaerch topic for approval	█	█	█																
5	Review of Literature	█	█	█																
6	Development of concept Note																			
7	Review of concept Note																			
8	Presentation of concept note during mockviva and Feedback																			
9	continue with Literature review				█	█	█	█	█	█	█	█	█	█						
10	Development of proposal																			
11	Development of research Tool																			
12	Submisssion of research proposal to supervisor for review																			
13	incorporation of feedback from Supervisor																			
14	Approval of Research proposal by supervisor																			
15	Submitting of proposal to REC for approval																			
16	Approval of Propasal by REC																			
17	Field visit to the study area.																			
18	Seeking Approval from Local Government Research Committee																			
19	Training of research Assistant																			
20	Collecting data																			
21	Data Processing and Analysis																			
22	Report Writing																			
23	Submission of research report to supervisor																			
24	Submission of Final Report																			

Appendix 2 Budget

Budget for Research Dissertation					
S/N	Activities	Unit Cost	Quantity	# of Days	Amount(UGx)
1	Personnel				
	Research Assistant	50000	3	5	750000
	Statistician	500000	1	1	500000
	Sub-Total				1250000
2	Travel				
	Travel to study area by Principal Investigator	100000	4	2	800000
	Travel to study area by Research Assistant	200000	3	2	1200000
	Sub Total				2000000
3	Materials and Supplies				
	ODK Phone	40000	3	1	120000
	Sub-Total				120000
4	Administrations				
	Bundles for Researcher	500000	1	1	500000
	Bundles for Research Assistant	100000	3	1	300000
	Creating ODK Server	500000	1	1	500000
	Venue for Training	100000	1	1	100000
	Sub Total				1400000
5	Result Dissemination				0
	Printing of Research Proposal	50000	3	1	150000
	Delivery of Reports to Stakeholders	50000	4	1	200000
	Sub-Total				350000
6	Contigency	500000	1	1	500000
	Sub-Total				500000
7	Time Compensation	500000	1	1	500000
	Sub-Total				500000
	Grand Total				6120000

**Appendix 3 Quantitative Questionnaire
Demographic Characteristics**

1. How old are you?

2 What is your place of residence?

a) Rural b) Urban

3) Sub-County_____

Parish_____Village_____

4) What is your religion?

a) Catholic b) Protestant c) Muslim d) Born Again e) Others

(Specify).....

5) What is your highest level of education?

a) Never been to school b) Primary completed c) Secondary completed

d) Post-Secondary (Certificate, Diploma, and University)

6) What is your marital status?

a) Single b) Married c) Separated d) Widow

7) What is your employment status?

a) Not employed b) Formal employed c) Business

8) What is the number of children you have?

a) No child b) One child c) Two children d) Three and
above

Questionnaire on barriers influencing modern contraceptive

9) Have you ever thought of using modern contraceptive methods to prevent pregnancy?

- a) Yes b) No

10) If yes to the above, have you ever used or currently using modern contraceptive methods to prevent pregnancy?

- a) Yes b) No

11) Where do you access modern contraceptive methods?

- a) Public b) Private C) both Public and Private

12) If yes to question 9) above, what method have you ever used or currently using? Circle more than one that applies.

- a) Condom b) Pills c) Injectable d) Implants e) IUDs f) Diaphragm g) Patches h) Spermicides i) Female sterilizations, j) Vasectomy K) emergencies Pills.

13) For how long have you used the contraceptives you're currently using?

- a) Once b) One week c) One to three months
d) Six months to 9 months e) One year f) Two years and above

Questionnaire on individual factors

14) What individual barriers prevent you from using family planning methods? Circle multiples if it applies.

- a) Desire to have children b) Fear of side effects c) Cost d) Rumors
e) Stigma f) Marital status

Questionnaire on Socio-Cultural factors

15) What social-cultural barriers do you face in using modern contraceptives?

Circle multiples if it applies.

a) Religion influence b) Culture influence c) Residence in the rural area

d) Partners' refusal e) Family member/community influence

g) Perception of the sexual immorality

16) Do you discuss with your Partner/Family member the use of modern contraception?

a) Yes b) No

17) If yes to question 15 above, does your Partner/Family member approve the use of modern contraceptive methods?

a) Yes b) No

18) What are the reasons why the Partner/Family member refuses you to use modern contraceptives?

a) Desire to have more children b) Rumors of Infertility c) Feeling of sexual pleasure

c) Rumors of Cancer d) Others (Specify).....

Questionnaire on health care setting/organization factors

19) What health care settings/institutions barriers do you face in using modern contraceptives? Circle multiple answers that apply.

- a) Distance is far b) Distance is too close where my relatives can know.
- c) Attitude of providers (health workers) d) Long waiting time e) Absence of preferred methods of choice. f) Privacy and confidentiality g) Policies are not friendly

20) Are modern contraceptive services always available?

- a) Yes b) No c) NA

21) Is the stock always available for the last 12 months?

- a) Yes b) No c) Unsure

Appendix 4, Qualitative Interview Guide

ID Number Age

House hold (HH) Number Village

1. Can you tell me about the individual barriers that affect the utilization of modern contraceptives in your area?
2. Tell me about the socio-cultural obstacles that affect the utilization of modern contraceptives in your area?
3. What do you think are the health care/institution factors that affect the community from utilizing modern contraceptives?
4. Is there anything you will like me to know about the utilization of modern contraceptive methods?

Appendix 5 Consent Form for Females above 18 years.

Survey title: Barriers to utilization of modern contraceptives methods used by females aged 15-24 years:

Principal Investigator: Azoru Luchio Mua, Address: Uganda Christian University
School of Public Health Nursing and Midwifery Program Plot....., PO Box

KAMPALA Mobile: +256 775763914 Email: azorudemua2013@gmail.com

Introduction

Good morning/afternoon.

My name is _____ We are working on a research study on the Barriers to utilization of modern contraceptive methods used by females aged 15-24 years in Moyo district, Uganda.

Purpose of the study

The purpose of this study is to identify the barriers to utilization of modern contraceptive methods used by females aged 15-24 years in Moyo district, Uganda. We want to be sure that you understand the purpose and your responsibilities in the research before you decide if you want to be in it. Please ask us to explain any words or information that you may not understand.

Procedures

The interview will last between 20 and 45 minutes, but you may stop it at any time. I will ask you about your experiences using contraception and your perception of contraceptive services at the community level. I will also ask you how you will like things to be done differently with contraceptive distribution at a community level.

Who will participate in the study?

We expect to interview females in the age group of 15-24 years to understand their experiences and feelings about the barriers to modern contraceptive methods.

Possible Risks

We do not expect that you are at risk of any bad things happening to you by participating in this interview. I will ask you to respond honestly and to the best of your ability. There is no need to worry if you do not know the answer to a question. We will not discuss your responses with anyone. We will not report to anyone whether you decided to participate in an interview. Your participation in this interview will not affect your relationship.

Possible Benefits

The information that you share with us will help family planning program managers find out the areas where improvements can be made to make modern contraceptive services more friendly to females. By participating in this interview, you will have a chance to share your experiences with decision-makers.

Confidentiality

We will protect the information you share with us to the best of our ability. We will not use your name in any reports. We will not tell anyone about your participation. We will not tell anyone the answers you give in this interview.

Study Approval The Uganda Christian University Research Ethics Committee and the Uganda National Council of Science and Technology approved this study.

Questions and rights as a participant.

Appendix 6 Assent Form for Females below 18 years.

Survey title: Barriers to utilization of modern contraceptives methods used by females aged 15-24 years

Principal Investigator: Azoru Luchio Mua, Address: Uganda Christian University
School of Public Health Nursing and Midwifery Program Plot.... PO Box

KAMPALA Mobile: +256 775763914

Dear Parent/Guardian:

Introduction

Good morning/afternoon.

My name is _____ we are working on a research study on the barriers to modern contraceptive methods used by females aged 15-24 years in Moyo district, Uganda. We would like to involve your child in our study

Purpose of the study, the purpose of this study is to identify the Barriers to utilization of modern contraceptive methods used by females aged 15-24 years in Moyo district, Uganda. We want to be sure that you understand the purpose and your child's responsibilities in the research before you decide if you want your child to be in it. Please ask us to explain any words or information that you may not understand.

ProceduresThe interview will last between 20 and 45 minutes, but you may stop it at any time. I will ask you about your experiences using contraception and your perception of modern contraceptive services. I will also ask you how you would like things to be done differently with contraceptive utilization.

Who will participate in the study?

We expect to interview females in the age group of 15-24 years to understand their experiences and feelings about the barriers to modern contraceptive methods.

Possible Risks

We do not expect that your child is at risk of any bad things happening to her by participating in this interview. All information will remain completely confidential. No child will be identified by name. I will ask them to respond honestly and to the best of their ability. There is no need to worry if your child does not know the answer to some of the questions. We will not discuss your child's responses with you or anyone. We will not report to anyone whether you declined your child to participate in an interview.

Possible Benefits

There will be no direct benefit to your child from participating in this study. However, the information that your child will share with us will help family planning program managers find out the areas where improvements can be made to make the utilization of modern contraceptive services more youth-friendly. By your child participating in this interview, she will have a chance to share her experiences with decision-makers.

Confidentiality We will protect the information your child will share with us to the best of our ability. We will not use your child's name in any reports. We will not tell anyone about their participation. We will not tell you or anyone the answers your child will give in this interview.

Study Approval

The Uganda Christian University Research Ethics Committee and the Uganda National Council of Science and Technology approved this study.

Questions and rights as a participant

If you have any questions about the research or your participation in the research, you may contact: Mr. Azoru Luchio Mua at 0775763914. Or Research Ethics Committee, at [Contact information to be added.]

Alternatives/Statement of voluntariness

You are free to decide if you want to participate in this interview or not. If you decide not to participate, this will not be reported to anyone. If there is a question you do not feel comfortable answering, you can tell me so, we can skip over it. You may also stop the interview at any time.

Confirmation of your consent to participate

Do you understand all I have just told you and do you permit your child to participate in this study? If you agree to participate in this study, you will need to sign this form.

PARENT/GUARDIAN AGREEMENT I have read the study information / the study information has been read to me. I have been asked if I have any questions, and these have been answered to my satisfaction. I freely agree my child participate in the study.

Name	Signature or Thumb Print	Date
------	--------------------------	------

INTERVIEWER: I certify that the nature and purpose, the potential benefits, and possible risks associated with participating in this research have been explained to the above individual, and the individual has consented to participate.

Name INTERVIEWER	Signature or Thumb Print	Date
------------------	--------------------------	------

APPENDIX 7: UCU Research Ethical Committee Approval Letter



**UGANDA CHRISTIAN
UNIVERSITY**

A Centre of Excellence in the Heart of Africa

16/09/2022

To: Azoru Mua

+256775763914

Type: Initial Review

**Re: UCUREC-2022-381: BARRIERS TO UTILIZATION OF MODERN CONTRACEPTIVES
METHODS USED BY FEMALES AGED 15-24 YEARS. A CASE STUDY OF MOYO
DISTRICT.,PDF, 2022-09-07**

I am pleased to inform you that the Uganda Christian University REC, through expedited review held on 16/09/2022 approved the above referenced study.

Approval of the research is for the period of 16/09/2022 to 16/09/2023.

As Principal Investigator of the research, you are responsible for fulfilling the following requirements of approval:

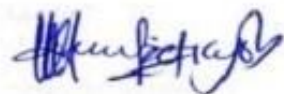
1. All co-investigators must be kept informed of the status of the research.
2. Changes, amendments, and addenda to the protocol or the consent form must be submitted to the REC for rereview and approval **prior** to the activation of the changes.
3. Reports of unanticipated problems involving risks to participants or any new information which could change the risk benefit: ratio must be submitted to the REC.
4. Only approved consent forms are to be used in the enrollment of participants. All consent forms signed by participants and/or witnesses should be retained on file. The REC may conduct audits of all study records, and consent documentation may be part of such audits.

5. Continuing review application must be submitted to the REC **eight weeks** prior to the expiration date of **16/09/2023** in order to continue the study beyond the approved period. Failure to submit a continuing review application in a timely fashion may result in suspension or termination of the study.
6. The REC application number assigned to the research should be cited in any correspondence with the REC of record.
7. You are required to register the research protocol with the Uganda National Council for Science and Technology (UNCST) for final clearance to undertake the study in Uganda.

The following is the list of all documents approved in this application by Uganda Christian University REC:

No.	Document Title	Language	Version Number	Version Date
1	Informed Consent forms	English	PDF	2022-09-07
2	Data collection tools	English	PDF	2022-09-07
3	Protocol	English	PDF	2022-09-07

Yours Sincerely



Peter Waiswa

For: Uganda Christian University REC

APPENDIX 8: Introduction Letter by Uganda Christian University



**UGANDA CHRISTIAN
UNIVERSITY**

A Centre of Excellence in the Heart of Africa

24th October, 2022

TO WHOM IT MAY CONCERN

Dear Sir/Madam,

RE: INTRODUCTORY LETTER FOR AZORU MUA.

Warm greetings from Uganda Christian University!

This serves to introduce the above named; Azoru Mua, as a Uganda Christian University student.

Mua is conducting a research as a requirement for the award of the above mentioned degree entitled; **Barriers to utilization of modern contraceptives methods among young women of 15-24 years. A case of Moyo district.**

She has fulfilled all clearance requirements such as getting Research Ethics Approval from UCU-REC which is accredited and regulated by Uganda National Council for Science and Technology (UNCST).

Any assistance given to her in achieving this goal will be highly welcome.
Thank you so much.

Yours faithfully,

Dr. Owor Joseph Jakisa
Head, Postgraduate Studies,
jowor@ucu.ac.ug



cc. Executive Secretary, Uganda National Council Science & Technology
cc. Chairperson, UCU-Research Ethics Committee

A Centre of Excellence in the Heart of Africa

P.O. Box 4, Mukono, Uganda (East Africa), Plot 67-173, Bishop Tucker Road, Mukono Hill, Tel: +256 (0) 31 235 0800, www.ucu.ac.ug
Facebook: Ugandachristianuniversity Instagram: @UCUniversity, Founded by the Province of Church of Uganda, Chartered by the Government of Uganda.

APPENDIX 9: Introduction Letter by Principal Investigator

UGANDA CHRISTIAN UNIVERSITY

PO BOX

MUKONO (KAMPALA CAMPUS)

DATE 21/10/2022

TO

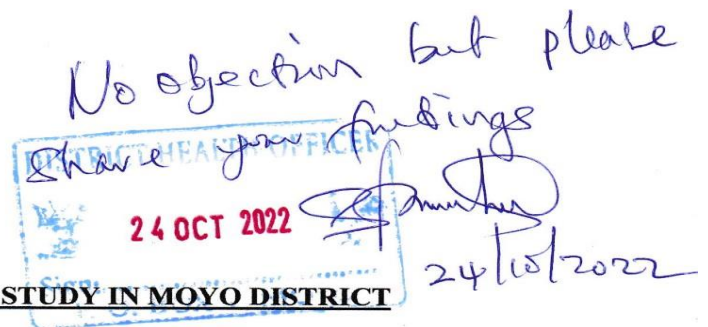
DISTRICT HEALTH OFFICER

MOYO DISTRICT LOCAL GOVERNMENT

PO BOX 1

Dear Sir/Madam

Ref: **REQEUST TO CONDUCT RESEARCH STUDY IN MOYO DISTRICT**



I would like to seek your permission to conduct a research study **Titled "Barriers to Utilization of Modern Contraceptive Methods among Young Women Age 15-24 years. A case study in Moyo District"**. I am a Final Year student of Uganda Christian University (UCU) pursuing Degree of Masters in Public Health. As part of the Course requirements, the UCU Research Ethical Committee (REC) has approved my research Protocol to conduct the study.

The data will be collected in 6 Subcounties/Town councils, 12 Parishes, 36 Villages and 423 Household.

The copy of letter for approval from UCU REC and Detailed area of research are attached.

Looking forward to hear from you soon.

Thank you

Azoru Luchio Mua

MPH (Student), BSN, DCN

Tel: 0775763914

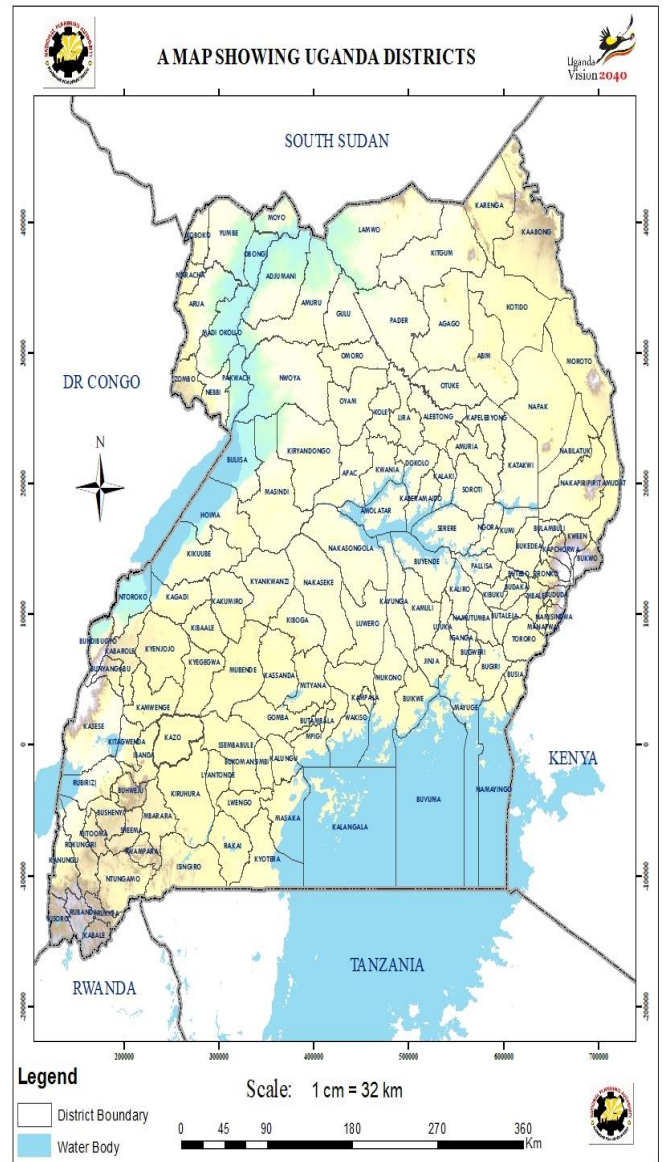
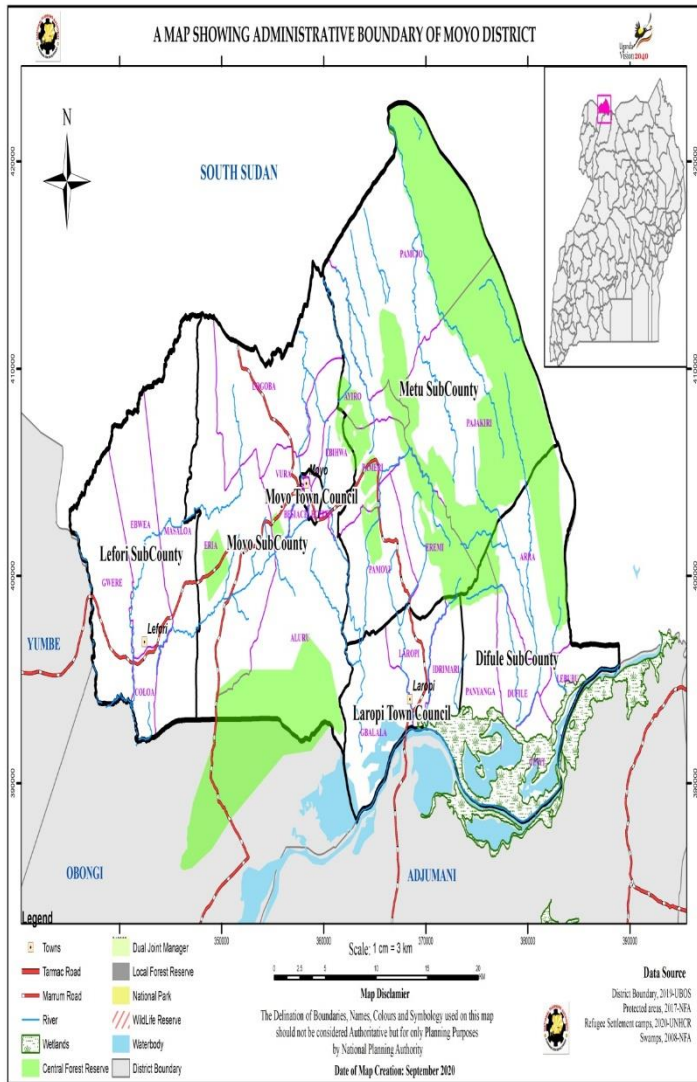
Email: azorudemua2013@gmail.com

24 OCT 2022

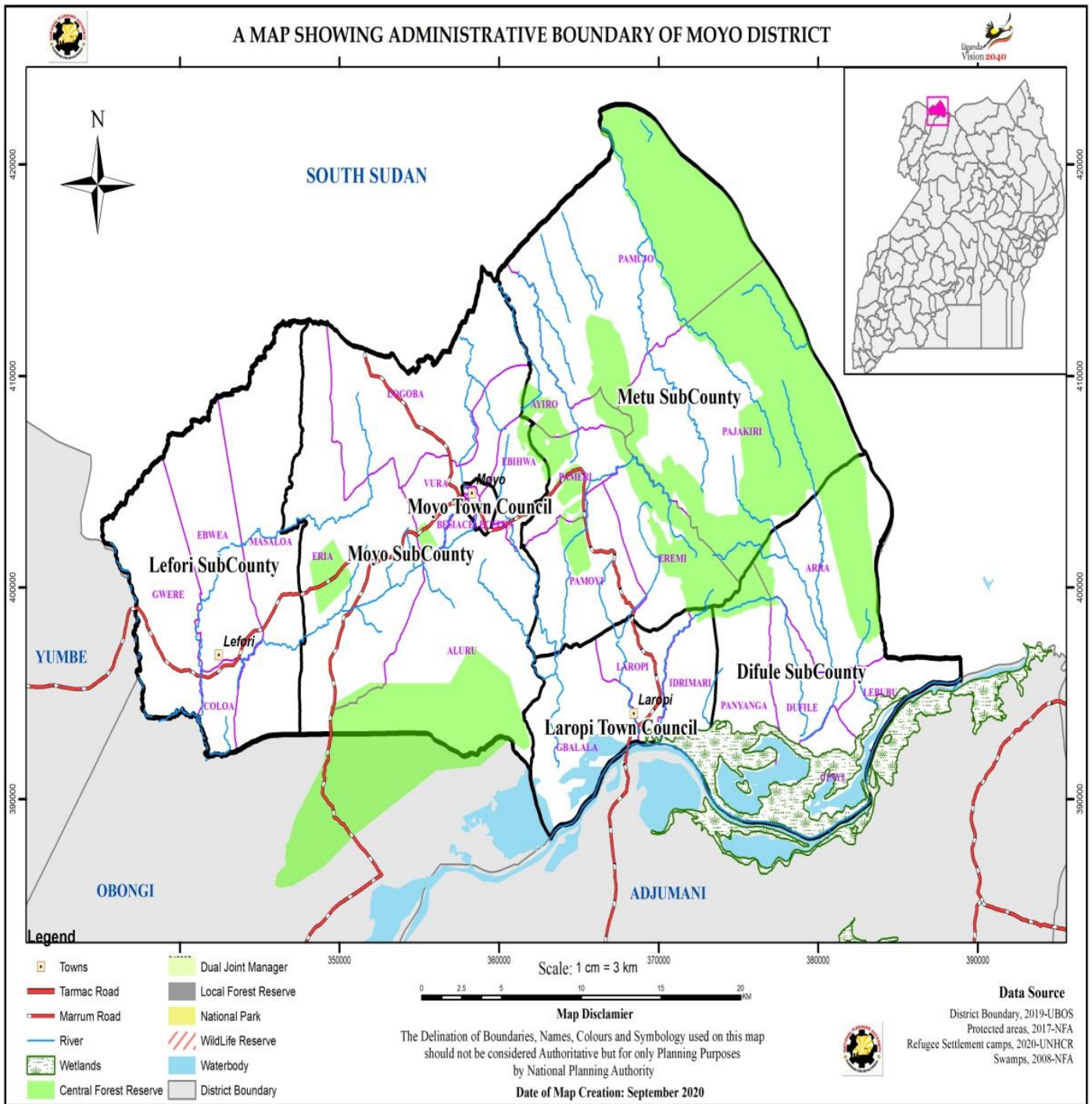
Based on Simple Random sampling the following Sub counties/Town Council, Parishes, Villages and Household will participate in the study in Moyo District.

Location of Research Area in Moyo District				
S/N	SUB COUNTIES	PARISHES	VILLAGES	Number of Participants
1	Moyo Town Council	Central Ward	Central 11	11.75
			Police Barrack	11.75
			Central1	11.75
		Celecelea	Celecelea East	11.75
			Edua	11.75
			Celecelea West	11.75
2	Laropi Town Council	Khidi Ward	Edre	11.75
			Ubbi South	11.75
			Khidi	11.75
		Idijo	Idijo	11.75
			Utuno	11.75
			Pakoma East	11.75
3	Lefori Subcounty	Masaloo	Masaloo East	11.75
			Masaloo West	11.75
			Lojili	11.75
		Cohwe	Diri	11.75
			Egule	11.75
			Cohwe	11.75
4	Dufile	Nzerea	Nzerea East	11.75
			Nzerea West	11.75
			Nzerea South	11.75
		Amuri	Amuri	11.75
			Ramogi Dufile	11.75
			Opi	11.75
5	Moyo Subcounty	Afoji	Fodia Central	11.75
			Afoji	11.75
			Minze West	11.75
		Eria	Kolokolo	11.75
			Oyajo	11.75
			Eria North	11.75
6	Otce Subcounty	Pamoyi	Cinyi West	11.75
			Palobure	11.75
			Cinyi South	11.75
		Abeso	Ijujo	11.75
			Pamelo	11.75
			Abeso	11.75
Total	6	12	36	423

APPENDIX 10 Map of Uganda showing the location of Moyo District



APPENDIX 11 Map Showing Administrative Boundary of Moyo District



APPENDIX 12: Post Viva Correction Form



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SCHOOL OF RESEARCH & POSTGRADUATE STUDIES

Dissertation correction compliance report by the candidate (POST VIVA FORM)

Date: 24/03/2024

Name of Candidate: AZORU LUCHIO MUA **Reg. No:** RJ2OM21/059

Title of Dissertation: BARRIERS TO UTILIZATION OF MODERN CONTRACEPTIVE METHODS USED BY FEMALES AGED 15-24 YEARS. A CASE STUDY OF MOYO DISTRICT

SN	COMMENTS BY EXTERNAL EXAMINER	ACTION TAKEN	INDICATOR
1	<p>The title should have “contraceptive methods” among young women replaced by contraceptive methods used by females aged 15-24 years because those aged below 18 years or so are not regarded as women but rather minors.</p> <p>First sentence under abstract should be edited --- to” medical procedures that interfere with” ---, also---“prevalence among females aged 15-24 years”. The objective should be edited to “general objective” and be made action oriented both in abstract and main report.</p> <p>Reasons for the choice of the study design should be provided both in abstract and under the main chapter of methodology.</p>	<p>Replaced young women with contraceptives methods used by females aged 15-24 years</p> <p>Corrected the first sentence in the abstract, edited the word General objective instead of the purpose of the study in the abstract and main body, and wrote the objectives in action-oriented.</p> <p>Included the rationale for the design in the abstract and under the main chapter methodology.</p>	Overall comments
2	<p>Chapter one should cover “Introduction and background” to the study.</p>	<p>Included the background to the study.</p>	Chapter one

	<p>Last paragraph on page 3 is quite false to suggest that Americans were already in the West Nile using herbs as contraceptives in early 50's in Uganda. Correct information should be given.</p> <p>Notwithstanding the above, the background is satisfactory. On page 4, last paragraph the age of the females should be indicated as 15-24 years not blank numbers.</p> <p>Problem statement is well stated but the purpose of the study should be made action oriented.</p> <p>is generally well documented.</p> <p>Literature coverage is wide and very useful but at the end of the chapter, there should be a summary highlighting major issues and showing the "Research gap" not the conclusion as presented. This is a very important statement that the methods actions would address.</p>	<p>Removed the false statement in the paragraph.</p> <p>Indicated the age of females aged 15-24 years.</p> <p>Objectives are written with action-oriented verbs.</p> <p>Identified the research gaps in the literature review.</p>	
3	<p>Study design was appropriate and well justified. The tools for the data collection were appropriate and so are acceptable. Study population was well stated.</p> <p>The first sentence under 3.4.1 should be corrected; also in bullet two, use correct tense in statements under 3.4.2. e.g. in bullet one, data collection and analysis activities were well done and well reported as well as ethical requirements.</p> <p>However, under informed consent (3.11.2) the second sentence--- "sought the voluntarily consent" --- should be corrected and apply correct tense.</p>	<p>The first sentence under 3.4.1 and 3.4.2 were corrected.</p> <p>Under informed consent, the statement "sought the voluntarily consent" was corrected.</p>	Methodology

4	<p>Below page 43, on page 44, majority of respondent should be respondents---, also below fig.5, starting with “ among the uses, majority of the respondent” should be in plural and also below page 44, and table 4 etc.</p> <p>The whole chapter “majority of respondent” should be in plural.</p> <p>Under table 9, the sentences should mention “respondents” not “the respondent” ---</p> <p>Qualitative results are very well presented.</p> <p>Results are good, no adverse comment. Discussion is fine but with limited reference. Study limitations should be expanded.</p>	<p>The whole of Chapter 4 was corrected and written in plurals to include respondents instead of respondent.</p> <p>Slightly expanded the study limitations.</p>	Results
5	<p>Conclusions and recommendations are useful and come directly from study results which is commendable.</p>	<p>No action needed.</p>	Conclusion

SN	COMMENTS BY INTERNAL EXAMINER	ACTION TAKEN	INDICATOR
1	<p>The language is reasonable and appropriate for the study... but the list of figures and tables should be part of the hyperlinked table of contents- not done manually</p> <p>Abstract, Fairly written but citations should be removed and sentence on ‘discussion’ be added in line with IMRAD</p>	<p>The table of contents inserted automatic and the list of figures and tables hyperlinked</p>	Overall structures

2	<p>Background, The content is relevant and aligned to the title</p> <p>Problem statement, Fair BUT it can be sharpened OR made more succinct</p> <p>Objectives, These are aligned to the title BUT- an objective on facilitators would have given the objective more value</p> <p>Literature review, Relevant literature was cited BUT there is need to summarize it at the end of chapter two so that the knowledge gap can be delineated</p> <p>Conceptual framework, This was just a sketch without any text! Ideally there should be variables on either side of the framework!</p>	<p>Sharpened the problem statement to be brief</p> <p>Since data was collected adding objectives on facilitators was a challenge</p> <p>Conclusion written and research gaps identified at the end of chapter two</p> <p>Modified the conceptual framework and included variables on either side of the dependent variables</p>	Introduction
3	<p>Research design, sampling and Data collection</p> <p>Mixed design used and the quantitative sample was described BUT the qualitative sample was not well described it is difficult to duplicate!</p> <p>Mixed design- sampling of quantitative respondents were well explained/described. But the qualitative sample is not clear who they were and how they were selected.</p>	<p>The qualitative sample design was described.</p> <p>Described the qualitative sampling methods.</p>	Methods
4	<p>Data analysis</p> <p>This is poorly done as per the comments inserted in the paper. The data is likely available and should be re-analyzed following the comments inserted</p> <p>Data presentation</p> <p>The presentation is poor as per the comments inserted in the text.</p>	<p>Analyzed the data again based on the comments in the report.</p> <p>Presented the data again based on the new analysis.</p>	Presentation and Analysis
5	<p>Conclusion</p> <p>The conclusion seems to come from the findings BUT if the analysis was poorly done, then the conclusions may not be valid</p> <p>Recommendations</p> <p>These too may not be valid because the analysis section was poorly done</p>	<p>Conclusion re-written based on the findings from the new analysis</p> <p>Recommendation adjusted based on the new findings from the new analysis</p>	Conclusion

SN	COMMENTS BY VIVA VOCE PANNEL	ACTION TAKEN	INDICATOR
1	The problem statement needs to be tightened to be more clear, especially in relation to the title.	The problem statement tightened to the title.	Problem statement
2	To ensure that the conceptual framework is aligned to the other sections	Conceptual framework aligned with other sections.	Conceptual framework
3	The conclusion should be aligned with the theoretical model.	Conclusion aligned to the theoretical framework.	Conclusion
4	Include the rationale of the choice of research design.	The rationale of the research design is included in the abstract and methodology chapter.	Research design
5	The title of the study should be aligned to the rest of the work.	The title of the study aligned to the rest of the work	Title of the study

Azoru Luchio Mua

Dr Shallon Atuhaire

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Candidate's Name

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Signature

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Supervisor's Name

.....
Signature