

**FACTORS INFLUENCING CONTRACEPTIVE USE
AMONG ADOLESCENT GIRLS AGED 14-19 YEARS IN
HOMA BAY COUNTY, KENYA**

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OF

AGRICULTURE AND TECHNOLOGY

2023

**Factors Influencing Contraceptive Use among Adolescent Girls Aged
14-19 Years in Homa Bay County, Kenya**

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**A Thesis Submitted in Partial Fulfilment of the Requirements for the
Degree of Master of Science in Public Health of Jomo Kenyatta
University of Agriculture and Technology**

2023

DECLARATION

I declare that this thesis is my personal work, and has not been submitted to the University or any other institution for award of a degree or any other academic credit.

Signature..... Date

Stephen Owende Owoko

This work has been submitted for examination with our approval as university Supervisors

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DEDICATION

This work is dedicated to the authors of the hundreds of books and research articles, without which there would be nothing to support my words, I praise you.

To my family . I apologize for the time this effort took from you and thank you for your patience, understanding and encouragement.

ACKNOWLEDGEMENT

This research project is my work, although it was only possible with the dedication and insightful guidance from the department of public health Kisii CBD campus of JKUAT University.

I wish to acknowledge my supervisors, Dr. Eddy Okoth Odari and Dr. Daniel Mokaya, for their patience, support, and guidance during the study. To my brother Joseph, thank you for your encouragement; I salute your effort.

I would also like to thank Benard Samba for his assistance during data analysis, as well as the research assistants who supported the data collection and the Mariestopes Kenya for allowing me time off to attend to my research project and for providing resources to facilitate my studies. Thank you, and God bless you.

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LIST OF ABBREVIATIONS AND ACRONYMS

AIDS	Acquired Immunodeficiency syndrome
ASRH	Adolescent Sexual and Reproductive Health
BMU	Beach Management Unit
DHS	Demographic health survey
EC	Emergency contraceptives
FDA	Food and Drug Administration
HIV	Human Immunodeficiency Virus
IEBC	Independent Electoral and Boundaries Commission
IUCD	Intra Uterine Contraceptive Device
KDHS	Kenya Demographic and Health Survey
KNBS	Kenya National Bureau of Statistics
LAM	lactation amenorrhea method
OC	Oral Contraceptives
OR	Odds Ratio
STI	Sexually Transmitted Infection
SPSS	Statistical package for social scientists
SRH	Sexual and Reproductive Health
WHO	World health organization

ABSTRACT

Adolescents are individuals aged between 10-19 years. This phase is characterized by rapid growth, sexual maturation, and sexual exploration. These behaviors expose sexually active adolescent girls to a greater risk of unintended pregnancies, unsafe abortion, and sexually transmitted infections. This study aimed to assess the factors influencing contraceptive use among adolescent girls in Homa bay county in Kenya with specific objectives assessing the level of awareness, and uptake as well as evaluating the factors affecting the contraceptive services offered to adolescent girls in Homabay County, Kenya. A cross-sectional survey was used to randomly select 385 girls and 32 health facilities in Homabay County, with a response rate of 100%. Data was collected using a semi-structured questionnaire, data entry was done using an excel sheet, and data was analyzed using SPSS 2017. Pearson chi-square and logistic regression were used to test how the main objectives relate to each other. The level of knowledge on contraceptives was 97.6% ($P=0.010$). The major sources of knowledge on contraceptives were teachers in schools (30%), peers (17.2%), and media. The study further revealed a reduction of knowledge among adolescents on available sexual and reproductive health policies (39.6%). The majority, 70% of the respondents, were in a heterosexual relationship, of which 58.6% preferred male condom use as their contraceptive method, while pills were the least at 0.6%. The majority (57.9%) of the girls did not practice safe sex, exposing them to a greater risk of sexually transmitted infections and unintended pregnancies. The level of contraceptive utilization varied significantly from one sub-county to the other ($p < 0.005$), with the sub-counties in the Lake Victoria Islands, such as Suba having up to 80% lesser chance of the girls using any form of contraceptives (OR = 0.2; CI: 0.2–0.8). The main barriers were the fear of side effects (51.8%) and self-stigmatization (13.4 %). Healthcare facilities were the primary source of contraceptives (77.1%), although the study noted a lack of youth-friendly services that would favor increased access. The cultural perception of the use of contraceptives among adolescent girls, misinformation, and poor youth-friendly services in health facilities are key drivers to the low uptake of contraceptive services by adolescent girls in Homabay County. Adolescent girls from the island stand a greater risk of non-utilization of contraceptives compared to the girls living on the mainland part of the county. There is a need to enhance the quality of youth-friendly comprehensive sexual health education services in all health facilities, emphasizing risk reduction interventions and sensitization of adolescent girls on the available policies. Mechanisms should be available, specifically to reach the adolescent populations living on the islands

CHAPTER ONE

INTRODUCTION

1.1 Background Information

Adolescents are between 10-19 years (WHO, 2014). Adolescence is a period of growth, transition, opportunities, and exploration. During this phase of life, they undergo physical and sexual maturation. Reports (UNFPA, 2012) also show that adolescents undergo cognitive, physical, behavioral, and psychological changes characterized by high levels of individual autonomy, sense of identity growth, self-esteem, and progressive independence from adults. A critical global health concern is ensuring that adolescents can protect their health (Dudas & Serwint, 2006). Such investments can delay the first pregnancy, decrease the maternal mortality, improve maternal health outcomes for women and their children, and reduce poverty.

According to Dudas and Serwint, (2006), girls (15-19) constitute one-fifth of all women of reproductive age globally. An estimated 16 million girls between the ages of 15-19 years and 2 million girls below the age of 15 give birth yearly (Manohar, 2012). It has also been reported that in the world's poorest regions, one in every three girls' bears children by the age of 18 years (WHO, 2014). According to (WHO, 2007), adolescents have the highest risk of maternal mortality compared with adults, with the pregnancy-related risk of death being twice as high for girls aged 15-19 years and five times higher for girls below the age of 15 years and 20-29 year respectively. Pregnancy-related complications and childbirth are among adolescents the leading cause of mortality in middle- and low-income countries. Pregnant adolescents are more likely to pursue unsafe abortions than an adult. About three million unsafe abortions occur yearly among adolescent girls between the ages of 15 and 19 (Manohar 2012). The adolescent and youth population (15-24) constitutes about 40% of all unsafe abortions that occur worldwide, and the problem of early childbearing is extended to their infants. Birth-

related complications and deaths of newborns are 50 percent higher among infants born to adolescent mothers than among infants of women between the ages of 20-29 years. According to (Manhor, 2012) adolescent mothers are at a higher risk of giving birth to low-birth-weight infants than older mothers. Several studies have shown high maternal and child mortality among adolescents, which has drawn attention from researchers and policymakers globally and has been prioritized for action. Every year, it is estimated that 79 million unintended pregnancies occur worldwide. More than a third of all pregnancies are considered unintended in developing countries, and about 19% end up in abortions that are often unsafe, accounting for 13% of all maternal death globally (Marston & Cleland, 2004).

A study carried out in Ghana to investigate contraceptive awareness, use and perception among adolescents found that there is a growing interest in adolescent reproductive health and that teenage pregnancy is a vital public health concern because it is associated with maternal, neonatal, and adverse fetal outcomes (Hagan & Buxton, 2012). Hagan and Buxton (2012) also reported that teenage girls who get pregnant are likely to drop out of school and cannot take care of their children

According to Tautz, in 2008, there were 16 million births to girls aged 15-19 years, which accounted for about 11% of births globally, with the majority of the births happening in developing nations and 6.1 million births being unintended (Tautz, 2011). Tautz (2011) further asserts that 2.2 million unintended adolescent pregnancies are reported annually in sub-Saharan Africa.

Contraceptive use can reduce the number of deaths among women by reducing the number of women who are at risk by averting unintended pregnancy, which accounts for nearly 30% of all births occurring in sub-Saharan Africa (WHO, 2008). Above 50% of unintended pregnancy in developing countries occurs among women who do not use contraceptives. The unmet need for contraception globally is estimated to be about 123-200 million. The unmet need for contraception in developing countries is about 113 million (Ross & Winfrey, 2002).

In the U.S., almost half of all pregnancies are unplanned, leading to about 3.1 million unintended pregnancies and 1.3 million abortions annually (Raine *et al.*, 2005). The highest unintended pregnancy rate occurs among young women, as 60% of pregnancies between 20 and 24 years old and 79% of pregnancies between 18 and 19 years old were unplanned (Raine *et al.*, 2005). Another study in the U.S. indicates that unintended pregnancies reduced from 51% in 2008 to less than 45% in 2011 (Finer & Zolna, 2016). Contrary to the results observed in the developing world, the percentage of unintended pregnancies among girls aged 15-17 years in the U.S. decreased by about 25%. Subsequently, in South Africa, two third of young girls aged 15-24 years were sexually active, half of whom had been pregnant at least once, and 65% of these pregnancies were unintended. (MacPhail *et al.*, 2007).

Women who want to avoid pregnancy, but are not using an effective method of contraception, account for a large majority of unplanned pregnancies. In Kenya, 43% of pregnancies are unplanned. Unmet need for contraceptive services is highest among adolescents aged 15-19 years and 20-29 years at about 30%, compared to 22% of 30-34 years and a quarter of women aged 35-44 years. The level of unmet needs continues to be higher in rural areas at 27% than in urban areas at 20%. For example, the current Nyanza and Rift Valley regions, in 2009, presented the highest levels, where approximately one-third of the women had unmet needs compared to Nairobi, Central, and North-Eastern provinces, which had the lowest, estimated at 15-16%.

Adolescents are at risk of pregnancy and sexually transmitted infections (STI) and HIV infections. The problem of unintended pregnancies and STIs in young women can be avoided through contraception. Providing sexual health and contraceptive services in an age-appropriate environment will be important to young women.

1.2 Statement of the problem

The early sexual debut among girls exposes them to greater risk of sexually transmitted infections, and unintended pregnancies and unsafe abortion. Globally, approximately 79

million girls experience unintended pregnancies leading to approximately 40% of those girls dropping out of schools (Hagan and Buxton, 2012). Further, it is estimated that 33.9% of this group will get sexually transmitted infections, whereas 18.75 % will undergo unsafe abortion.

These challenges are more common in Sub Saharan Africa where it is estimated that 2.2 million girls (2.8 %) will experience unintended pregnancies, 13.7% get STI, and 19% undergo unsafe abortions every year. (Marston, & Cleland, WHO. 2004). In Kenya, data from the Ministry of Health (MOH, 2020) and African Institute for Development Policy (AFIDEP) show that 33% of girls aged 15-19 years in Homa Bay County have begun childbearing - considerably higher than the national average. Specifically, the data suggest that 2.1% of girls in the region are pregnant with their first child while 31.2% have ever given birth, compared to the national average of 3.4% and 14.7%, respectively (KDHS, 2014. The effective use of modern contraceptives among adolescent girls can delay their first pregnancy, decrease maternal mortality rate and improve their maternal health outcomes and those of their children when they become young women. Studies in Kenya have shown that despite the availability of the modern contraceptive services, majority of adolescent girls are still reluctant to embrace contraceptive use compared to older women (Raine TR, et al.2005). This study was aimed at assessing the factors influencing contraceptive use among adolescent girls in Homa bay county, Kenya

1.3 Justification of the study

Homabay County has 23.2% prevalence of teenage pregnancy and 2.6% prevalence of unsafe abortion as documented (KDHS2022), a policy framework is needed to mitigate the problems. The policy framework can only be guided by solid evidence on the factors influencing contraceptive use generated through data. In this regard, this study identifies the need to examine the factors that affect the use of contraceptive methods among adolescent girls aged 14-19 years. Adolescents are a fundamental group undergoing various developmental stages concerning sexual reproductive health. In this group, there

is already a high rate of emancipated minors occurring through early marriages and early sexual debut.

Further, establishing the magnitude of the problem and drawing practical recommendations for planners and program managers are needed to implement youth-friendly contraceptive service delivery in the study area. Therefore, apart from assessing the magnitude of contraceptive use, this study will provide information on the level of awareness, utilization, and factors affecting the service delivery of contraceptive service to adolescent girls. It will further help identify the needs of these girls regarding their sexual health

1.4 General Objective

To determine the factors influencing contraceptive use among adolescent girls aged 14-19 years in Homa Bay County.

1.4.1 Specific Objectives

1. To determine the level of awareness of contraceptive services among adolescent girls aged 14-19 years in Homa Bay County.
2. To assess the level of contraceptive uptake among adolescent girls aged 14-19 years in Homa Bay County.
3. To determine the factors affecting the contraceptive services offered to adolescent girls aged 14-19 years in Homa Bay County.

1.5 Research Questions

1. What is the level of awareness of contraceptive services among adolescent girls aged 14-19 years in Homa Bay County?
2. What is the level of contraceptive usage among adolescent girls aged 14-19 years in Homa Bay County?
3. What are the factors affecting the contraceptive services offered to adolescent girls aged 14-19 years in Homa Bay County?

1.6 The Scope of the Study

This study is based on primary data collected from Homa Bay County. A sample of adolescent girls was used to deduce information about the determinants of contraceptive uptake. The scope of the study was limited to the availability of the total population of adolescent girls in Homa Bay County.

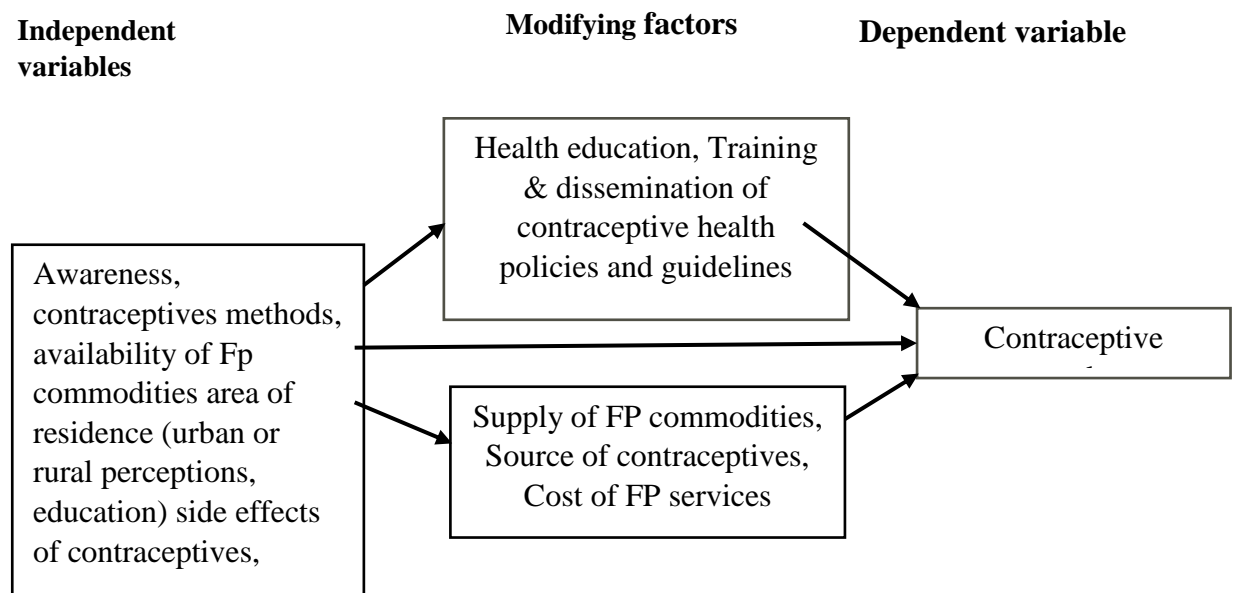


Figure 1.1: Conceptual framework of assessment of contraceptives among adolescent girls 14-19 years in Homa bay County

CHAPTER TWO

LITERATURE REVIEW

1. 2.1 Introduction

Different kinds of contraception act at different points in the process. This section reviews the contraceptive methods and studies related to the determinants of contraceptive methods uptake among young people.

2.2 Contraceptive methods

The common modern contraceptive methods such as oral contraceptives, intrauterine device, implants, condoms, dermal patch, and vaginal rings are discussed in this section.

2.2.1 Oral Contraceptives

Modern contraceptives became popular after the introduction of oral contraceptives in the 1960s. This was the turning point; since then, approximately 200 million women have been using combined oral contraceptive pills. According to (Scott & Glasier, 2006) Oral contraceptives act by inhibiting ovulation, while Progestogen-only pills act by altering cervical mucus to reduce sperm penetration and the endometrium to reduce implantation.

2.2.2 Injectable Contraception

This is done through an intramuscular injection of 150mg of medroxyprogesterone acetate, introduced in 1963 and protected against pregnancy for at least three months. Depot injections of progesterone have a strong inhibitory effect on ovulation. Noresterat is usually given every two months (Scott, & Glasier, 2006).

2.2.3 Implantable Contraception

Subdermal contraceptive implants deliver a continuous low dose of progesterone from the polymer rods. Norplant contraceptives contain levonorgestrel in 6 implantable rods

for removal after the fifth year. Implanon has two rods four centimeters in length with a total dose of 150 mg levonorgestrel for three to five years. Alevonorgestrel implant prevents sperm movement through the female genital tract and etonogestrel leads to anovulation (Scott & Glasier, 2006).

2.2.4 Patch and Ring

New delivery systems for hormonal contraception are vaginal rings and transdermal patches (Scott & Glasier, 2006). The patch delivers 20ug of Ethinyl estradiol and 150ug of Norelgestromin daily. The dosing is one patch weekly for three consecutive weeks, followed by a patch-free week. The FDA approved a combined estrogen/progestin contraception vaginal ring for use in the USA in 2001. The vaginal ring is a flexible ring made of ethylene vinyl acetate copolymer. It releases 15ug ethinyl estradiol and 120ug etonogestrel daily. The ring is placed in the vagina for three weeks, followed by a one-week ring-free period to allow for regular menstrual bleeding. The patch and ring are identical to the combined oral preparation in terms of WHO Medical Eligibility Criteria (Powers *et al.*, 2015).

2.2.5 Condom Method

There are two types of condoms, male and female condoms. The male condom is the most commonly used form of condom. It creates a physical barrier preventing sperm from reaching the ovum and decreases the risk of sexually transmitted infections. Male condoms may be polyurethane, latex, or treated animal tissue. It covers the penis, thus preventing the sperm from meeting the egg (Rakhi & Sumathi, 2011).

The female condoms or vaginal pouch have been developed and is a relatively new method that gives women control of a barrier method and provides protection against sexually transmitted infections. The condoms are made of polyurethane sheath that contains two rings. One ring is inserted into the top of the vagina, and the other ring sits outside the opening of the vagina to fit the shape of the vagina (Rakhi & Sumathi, 2011). The male penis then goes inside the female condom during intercourse.

2.2.6 Emergency Contraception

Emergency contraception (EC) is any method of pregnancy prevention used after unprotected or inadequately protected intercourse and before implantation. It is a safe and effective post-coital contraceptive method that can reduce the risk of unintended pregnancy after unprotected sexual intercourse within 72 hours of intercourse. Research has shown that EC pills are effective when started between the third and fifth day after unprotected sexual intercourse, with effectiveness rates ranging from 72% to 87% (Rodrigues *et al.*, 2001).

The contraceptive effect is estimated mainly to be due to inhibition or delay of ovulation or preventing the implantation of a fertilized egg; however, it does not interfere with an established pregnancy because they are ineffective after implantation. Emergency contraception is not as effective as other contraceptives' consistent and correct use. Emergency contraceptive pills may contain only progestogen in the form of Levonorgestrel (0.75mg) which is repeated after twelve hours, or a combination of estrogen and progesterone (Ethinyl estradiol 0.1 mg and levonorgestrel 0.5 mg), which are taken twice twelve hours apart within seventy-two hour of exposures to unprotected sex (AM, 2012).

2.2.7 Other contraceptive Methods

Other contraceptive methods include lactation amenorrhea, rhythm withdrawal, diaphragms, cervical caps, and other natural family planning methods (Rakhi & Sumathi, 2011). Male and female sterilization are irreversible forms of contraception and are not commonly used by young people (Scott & Glasier, 2006).

2.3 Knowledge and Awareness of Contraceptive Services

Education programs on contraceptive services should reach out to both males and females and provide correct information on the risks of unintended pregnancy, possible side effects of contraception, the benefits of birth spacing, and safety to encourage positive attitudes toward family planning (WHO, 2020).

Various safe and effective contraceptives are available, and stakeholders are trying to increase their availability and access. However, unintended pregnancy remains a considerable social and public problem (Oye-Adeniran *et al.*, 2006). Lack of adequate knowledge and awareness is associated with a lack of contraceptive use among young women. Its use is associated with previously being pregnant, meaning that young girls are only being educated about contraceptive services offered after becoming pregnant (MacPhail *et al.*, 2007). A study carried out among adolescents reported that some pregnant adolescents got pregnant due to a lack of knowledge of and accessibility of contraceptives (Garenne *et al.*, 2000).

Poor knowledge and lack of contraceptive awareness are common among young girls seeking abortion services (Oye-Adeniran *et al.*, 2006). Moreover, it is necessary to ensure the dissemination of accurate information to young women about contraceptives. The major sources of information for young women about contraceptive services are media, peers, friends, and nurses. Clients seeking family planning services have prior counseling about the side effects of methods of chosen help to counter side effects (Oye-Adeniran *et al.*, 2006). In a study conducted in Nigeria, the awareness level of contraceptives was noted to be high in some communities; however, a good understanding of different contraceptive methods was shallow (Onwuzurike & Uzochukwu, 2001). Therefore, there is a need for young women to get information concerning contraceptives and to promote their right to control reproductive health, create awareness and eliminate myths about contraceptives (Shoveller *et al.*, 2007).

The adolescent need for HIV and pregnancy prevention information has been a sensitive issue in sub-Saharan Africa which has led to policy and political debates about what information should be given to adolescents and the age at which to start such interventions (Bhana, 2006). Various stakeholders have argued that teaching adolescents about sex and reproductive health would encourage them to indulge in sexual activities. However much contraceptive use among adolescents is considered a sensitive issue, there is increasing consensus and acknowledgment that it is essential to institute effective sex education programs to equip young people with information and skills to

help them make informed and responsible decisions on their sexual and reproductive health matters. The low levels of in-depth knowledge of HIV/AIDS and pregnancy. Adolescents receive information about HIV, STIs, and contraceptive methods from various sources, and they do so from more than one source. Of these three topics combined, mass Media is the most used source of information for young adolescents. Emerging evidence demonstrating the unique vulnerability of young people, particularly females, to HIV infection and unintended pregnancies has highlighted the need to develop effective intervention programs to protect the next generation of productive and reproductive adults in Sub-Saharan Africa. Empowering young adolescents with adequate and accurate knowledge on how to protect themselves from STIs and pregnancy is warranted by the finding that 12–14-year-olds are not as naïve on sexual matters as one may think. For example, at least 3 in 10 of 12–14-year-old girls in Uganda and boys in both Uganda and Malawi reported that they had experienced some form of intimate sexual activity (Bankole *et al.*, 2007).

As young people enter their reproductive years, the demand for family planning will increase, and programs must be equipped to satisfy this demand. A study among college students in America showed that nearly all respondents (94%) said they had heard of Emergency contraceptives before receiving the survey. However, 12% indicated that they did not know the most extended time window for effectiveness, and 45% of respondents stated that emergency contraceptives must be taken within three or seventy-two hours after having unprotected sex. Only 5% responded that Emergency contraceptives must be taken within five days or 120 hours

(Vahratian *et al.*, 2008). Respondents first learned of Emergency contraceptives from a variety of sources, including the media (43%), friends or peers (22%), and school-based curriculum (18%). Studies on emergency contraceptives knowledge and utilization show that while the general public and university students have heard of it, they generally lack sufficient knowledge about what it is, how it works, and how to access it (Corbett *et al.*, 2006).

Accurate knowledge of emergency contraception among young people on contraceptive methods is low, and only a few have accurate and detailed information regarding emergency contraception. Many who report familiarity with emergency contraceptives were found to have misinformation, and very few knew the correct use timing. A lack of detailed and accurate information on contraceptives was found to have resulted in a reluctance to adopt family planning methods as some will want to know its side effects and contraindications (Muia *et al.*, 2000). Among university students in Ethiopia, it is only about 44 percent who have ever heard about emergency contraceptives. However, below 10 percent have the correct knowledge of when to use it (Tamire & Enqueselassie, 2007). Previous studies that targeted pregnancy prevention among the adolescent population have focused on the role of contraceptive knowledge in determining contraceptive utilization. Some have found no relationship between knowledge of contraceptives and contraceptive uptake behavior among young women. It was recognized that young women are not badly educated on contraception or fertility, but their education is not adequate to ensure consistent, effective contraceptive uptake (Muia *et al.*, 2000).

2.4 Factors Affecting Awareness of Contraceptive Services

Many research studies have been done in several parts of the world to explore the knowledge and awareness of contraceptive services. As discussed below, factors have been identified that influence the knowledge and awareness of contraceptive services.

2.4.1 Age Group

Awareness of contraceptive methods is lowest among adolescents and best among 20-34 years age group (Tuladhar & Marahatta, 2008). According to Parkes *et al.*, (2009) the higher the women's age and lower their level of education, the more likely they were exposed to reproductive health messages through home visits, meetings and neighborhood communication (Snyder, 2007).

2.4.2 Level of Education

Several studies conducted has found that education is the main influencing factor on fertility. They established that when women's education level was of secondary or higher, awareness level is 100.0%. For instance, a study carried out in Pakistan reported 95 % awareness level in educated women as compared with 73.0% in illiterate women (Zafar *et al.*, 1995). Similar study conducted in Bombay also made conclusion on education being the main variable and influencing factor in the decisions regarding family planning and contraceptive awareness (Rai, 2013). In another study carried among the rural Indians, (Gilliam *et al.*, 2008), found that high level of education helps in improving acceptance of contraceptive services

2.4.3 Area of Residence

The awareness level of contraceptive is greatly influenced by urban background of the women. According to DHS survey carried out in Pakistan, it found out that, there were big differences in knowledge between the women living in urban and rural areas. 94.0% of the currently married women living in major cities knew of at least one modern contraceptive method whereas women in rural areas only 71% knew of a modern method (Zafar *et al.*, 1995).

2.4.4 Uptake of Contraceptive Methods

Contraceptive prevalence has increased dramatically in the last five decades. Contraceptive choices, there are marked differences between countries. Age and stage of life is a major determinant of contraceptive choice (Scott & Glasier, 2006). In the recent years, the contraceptive use among young women has increased while consistence reliance on effective form of contraception has remains low. According (Davies 2006), the reasons for inconsistency on contraceptive use are not easily characterized, as they are as diverse and complex, although continuous correct use of contraceptives during the entire periods of risk can significantly reduce the likelihood of unintended pregnancy, many women have difficulty adhering to such a regimen for a longer period. A better understanding of why young women has difficulty using contraceptives continuously

even when they do not want to become pregnant will strengthen programs and policies that are designed to reduce unintended pregnancy. Women's perception towards preventing pregnancy, clients experience with contraceptive methods, socioeconomic background and sexual partner's characteristics are among factors that affect uptake of contraceptives services (Frost *et al.*, 2007).

The use of modern contraceptive methods among adolescents in some communities has been found to be low. Only 30.4% of sexually active adolescents were found in a study in Nigeria to be using any form of modern methods and only 6.2 percent use condom. Many relied on traditional methods such as periodic abstinence and coitus interruption (AOU, 2000). In spite of significant risk of unwanted pregnancy and induced abortion the practice of contraceptives was found to be very low among young female undergraduates in Ethiopia (Tamire & Enqueselassie, 2007). Major factors which influenced the choice of contraceptives for users were convenience and effectiveness, so where users are offered a range of commodities that effective and convenient usage will likely increase. 88.5% were found to be satisfied with current contraceptive methods (Oye-Adeniran *et al.*, 2006).

Most women at family planning clinics have been found to have decided already which contraceptive methods they want and that failure to obtain that method is probably the biggest deterrent to adoption and sustained use (Cleland *et al.*, 2006). Addition of a new method has been found to attract new users and raises overall frequency of use (Ross & Winfrey, 2002). Rising adherence and continuation rate difficulty are not different from other forms of prolonged medication (Blaschke, 2005). Despite being sexually active, majority of adolescents do not always use methods like condom or use them inconsistently (Ohene & Akoto, 2008). Contraceptive behavior was studied in a national household survey among Greek females, ages 16-45 years, in 2001. The sample of 797 was representative of the Greek female population. 6.9 % of women participating in the survey reported not being sexually active and were excluded from the analysis. The most common current contraceptive method was the condom, at the rate of 33.9 %, followed by withdrawal at 28.8 %, OC at 4.8% and IUD at 3.6%. Among oral

contraceptives users, 40 % of them used the pill for medical reasons. Participants were also asked to report all methods they have ever used. Of all respondents, condoms had been used by 9.3% withdrawal 66.4 %. Oral contraceptive 30.8%, periodic abstinence 21.9 %, and IUD 10.8% (Tountas *et al.*, 2004).

In the U.S., it was found among young women at risk of unintended pregnancy and sexually transmitted disease that 40% (n = 168) of women used barrier methods (98% condoms). 32% (n = 123) hormonal methods (oral contraceptive pills, injectable and implants), and 23% (n = 87) used no method. Only 7(28) of women were dual-method users of both hormonal and barrier methods at last intercourse. Women with a previous abortion were significantly more likely to use no method of contraception and less likely to use barrier methods compared to those without a history of abortion (35% vs 21 % and 29% vs 47%, respectively). Women raised with a religion were significantly less likely to use a hormonal method of contraception (27% vs, 39%), Women whose mothers had their first birth before age 20 were also significantly more likely to use no contraceptive method (42% vs. 19%). as were women who believed they were infertile. Half of women in the study had their first vaginal intercourse at age 15 years or younger; these women were less likely to use barrier methods compared to their counterparts who first had intercourse after age 15 (38% vs. 50%. respectively.) Women who believed they were unlikely to contract an STI in the next year were significantly less likely to use no method and more likely to use hormonal methods compared to those who believed they had some likelihood of contracting an STI (19% vs. 29% and 37% vs 26%, respectively,). Women who had multiple partners or believed their main partner had other partners in the last 6 months were significantly more likely to use barrier methods compared to their counterparts who only had one partner or believed their partners were monogamous (52% vs. 40% and 54% vs, 40%, respectively (Raine *et al.*, 2005).

A study on contraceptive use at first intercourse among teenagers found that teenage girls aged 16 years or under who reported Oral contraceptive only use at first intercourse were more likely to become pregnant than those reporting condoms only. Also, that nonuse of contraception at first sexual intercourse is associated with subsequent

pregnancy. However, there was no difference in pregnancy risk according to whether condoms were used alone or with Oral Contraceptives. The ineffective use of oral contraceptives was found to have reflected dislike of side effects, difficulties over concealment, or chaotic sexual lifestyle and that poor understanding of oral contraception may also have contributed to risk miscalculation. Some girls may have been prescribed the pill for menstrual problems and may not have acquired sufficient knowledge to use it correctly as a contraceptive. The study suggests that for young teenagers in their first sexual relationship, condoms may be easier than oral contraception to use effectively (Parkes *et al.*, 2009).

Weak community based family planning program do not often ensure accessibility to family planning services, and a gap between knowledge of contraceptive methods, being able to get access to them and actual effective use has been identified (Senbeto *et al.*, 2005). Partners' communication influences contraceptive decisions. Young women who communicate less frequently with their sex partners about prevention issues are less likely to use contraceptive consistently. Culture that discourages openness and honest discussion about contraceptive use has been found to limit access to accurate, protective information and therefore increase risk taking by young women (Davies *et al.*, 2006). There is need to involve male partners and work on developing communication skill of a young adult in sexual relationship as a solution to limited contraceptive use (MacPhail *et al.*, 2007). Ambivalence feeling towards pregnancy interferes with effective contraception and that young women require motivation (MacPhail *et al.*, 2007).

2.5 Factors influencing the uptake of contraceptives

Several factors account for the low/high uptake of modern contraceptives especially in the developing world. The UNFPA in its latest report noted that poverty and a majority of those who reside in rural communities lack access to modern contraceptive services. The challenge of reaching out to these groups of people is still prominent and has left more than 200 million women who desire to use contraceptives not being able to use them (UNFPA, 2014). The determinants that are attributed to the uptake of modern

contraceptives in Africa and particularly in Kenya are most often similar among countries. The latest DHS comparative report indicates a number of factors which may or may not compel an individual to use a contraceptive. According to the report, geographical location, either rural or urban, influenced uptake. People who lived in urban centers used contraceptives much more than those who lived in rural areas. It also confirmed the many studies which stated that education positively influenced utilization. Among women between 15-24 years, higher education showed a statistically significant association with contraceptive utilization. However, in countries like Burkina Faso, Liberia, Mauritania and Senegal, education showed an inverse relationship with utilization. Other factors the report mentioned included individual wealth/income, parity and knowledge of contraceptives (MacQuarrie, 2014).

A study on contextual influences of modern contraceptive use in sub-Saharan Africa also outlined similar factors as contributing to the utilization in sub-Saharan Africa. Demographic characteristics such as age, marital status and gender were mentioned as determining factors. Others were partner consent, cultural norms and the general economic development of the country or region. Quality of service provision, education especially of women and religion also influence contraceptive utilization (Stephenson *et al.*, 2007).

2.6 Barriers to the uptake of contraceptive methods

Young women constantly face barriers to contraceptive use. Many have used a range of strategies to overcome barriers to effective contraception without success and some pregnant adolescents have attributed their pregnancy to difficulty in obtaining contraceptives (Garenne *et al.*, 2000). Despite the growing efforts and successes in increasing availability and access to these contraceptives, unintended pregnancy remains a considerable social and public health concern. Globally, significant unmet need for contraception remains and difficulty of use, concerns about side effects or long-term health effects, and barriers to access may deter use of contraceptives. Young women often have difficulty accessing and correctly using contraception. Some identified

barriers to effective contraceptives are lack of concern over the possibility of pregnancy, perceived invulnerability to pregnancy, forgetfulness institutional policy on contraceptives, socio-cultural norms, poor access regarding location and low socioeconomic status (Frost *et al.*, 2007; Kaufman *et al.*, 2001; Shoveller *et al.*, 2007). Partner resistance, fear of partner rejection, discomfort buying or carrying contraceptive are barriers that are likely to persist over time despite continuous exposure and experience, unless specific skills are acquired. Fear of losing a sexual partner for insisting on use of condom has been shown to be a barrier to condom negotiation among female adolescents, especially when communication and assertive skills are inadequate (Davies *et al.*, 2006). The barriers to effective utilization of contraceptive services are as classified below.

2.6.1 Socio-demographic Barriers

Age is one of the barriers to use of contraceptive services. Older women are less likely to use the contraceptives than younger women. In contrast, older women are more likely to use long-lasting methods or sterilization. In a study by Murti in 2007 in Indonesia, there was a strong relationship between women's age and non-use, using long-term and short-term methods. Education has a positive relationship with contraceptive use and can determine contraceptive methods choice. The more educated women are more likely to use contraception and have their own contraceptive choice. A study conducted in Ethiopia has shown that only 10 percent of women with no education use contraception, though it is used by 53 percent of women with secondary education (Alemu Sufa, 2015). The unmet contraceptive need is 35 percent for women without education, while only 17 percent of women with secondary or higher education have an unmet need (Alemayehu *et al.*, 2012). Number of living children can affect contraceptive use and choice of all methods. According to the 2010 Rwanda Demographic and Health Surveys, Contraceptive use also increases rapidly as the number of living children increases. The number of live children was an important predictor of demand for contraceptive methods among women of reproductive age. This is evidenced by the study by Mussie *et al.* in 2012, where mothers with two or more pregnancies were three times more likely to use

contraceptive methods than those who had been pregnant only once (Alemayehu *et al.*, 2012).

2.6.2 Socio-cultural Barriers

Family pressure and societal stigma may also pose barriers due to cultural or religious norms dominant in the area in which adolescent girls aged 15-19 years lives. In the study by Muramutsa in Gasabo, Gatsibo, Nyagatare, Nyamagabe, Nyarugenge and Rulindo districts in 2007 revealed that Socio-Cultural factors hinder Family Planning Practice in Rwanda where respondents expressed adherence to pro-birth culture (May, Muramutsa, 2007). A published study using data from 2002 reports that Indian women with a specific family composition of two boys and one girl were 90% less likely to report having another pregnancy and 12 times more likely to be sterilized than women with two daughters only (Edmeades *et al.*, 2012).

2.6.3 Provider Attitude

A poor attitude derived from the constraints above, combined with fear of recrimination from unhappy users, can be a significant barrier against adolescent girls who want to use contraceptive services (Gilliam *et al.*, 2008). Health workers, from physicians to nurses and technicians, may have personal biases that can contravene national policy. In a study conducted in the United States on physician influence, 45% of physicians would discourage contraceptive sterilization in woman who had had two pregnancies and one live birth, In comparison 29% would do so for a woman with four pregnancies and three live births. The study conducted in Egypt in 2013 showed that about one-third of the non-users and more than three-quarters of the discontinued women had been told to return later date while they were menstruating (Eltomy *et al.*, 2013).

2.6.4 Access Barrier

Barriers may also exist in terms of poor access to and availability of contraceptive services. In rural areas, distance can be prohibitive contraceptive services. The study conducted in Pakistan, evidenced that contraceptive uptake increases when services are expanded. The opening of new family planning clinics in urban areas contributed to a

rise in female use of contraceptives from 14% to 22% in three years (Hennink & Clements, 2005). The results from a qualitative study conducted by Muramutsa in Gasabo, Gatsibo, Nyagatare, Nyamagabe, Nyarugenge and Rulindo districts in 2007 revealed that the lack of trained staff may hinder the access to contraceptives.

2.6.5 Religion Barriers

The extent to which religion plays a role as a barrier to sterilization depends upon the religion, religious leaders' interpretation of the Bible and Koran, and the homogeneity of the faith in a particular region (Tanner & Mitchell, 2016). A sample of women in India showed that the prevalence of sterilization among Muslim women (14%) was lower than among Hindu women (29%) and women from other religious groups (30–35%), at the same time, non-Muslims in Bangladesh were twice as likely to undergo sterilization as Muslims (De Oliveira, *et al.*, 2014). However, sterilization rates can still be high in Catholic countries such as Brazil and in Muslim countries such as Turkey, which implies that religious guidelines are not always (whether by necessity or choice) strictly interpreted, implemented, or adopted (Bikorimana, 2015).

2.6.6 Side Effect Barriers

In northern Karnataka, South India, the IUD is the most popular reversible contraceptive method but has a low continuation rate. A total of 713 IUD acceptors (461 rural and 252 urban) were interviewed to study factors influencing the continuation of IUD use in south India. Only 35% of respondents had their original IUD in situ at the time of follow-up and 57% had requested removal, primarily because of side effects (Thapa, *et al.*, 2015). In qualitative study Conducted in India to assess factors affecting contraception among women in a minority community in Delhi (Rustagi *et al.*, 2010) revealed the same where many participants hesitated to use intra uterine devices. Pain, bleeding disturbances, infection, discomfort with regular checking of thread and doubts about method reliability were the common concerns (Rustagi *et al.*, 2010).

2.6.7 Misinformation Barriers

There was a high degree of association between knowledge about contraceptives and the use of contraceptive services (Kokila, 2012). This is evidenced by results where women with moderate to high knowledge of contraceptives were six to eight times more likely to use contraceptive services than those with low knowledge (Bulto, *et al.*, 2014). Myths and misconceptions were identified in various studies as a barrier using LACM. In the study conducted in Ethiopia among women who had general knowledge about LAPMs, 77 (33.2%) heard myths and misconceptions. Among these women who encountered myths and misconceptions, 19 (24.67%) said that use of Norplant would affect their health negatively. They said Norplant could cause hypertension, mental illness, anemia, weight gain, uterine mass, headache and fever. Some women 4 (5.2%) encountered that implants could move around freely in the body once inserted and could be lost at the day of removal. A high number of women, 17 (22%) among those who heard myths and misconceptions, said implants might lead to permanent sterility, and about 12(15.6%) heard IUDs could do the same. Of most women, 16(20%) were concerned about the health effect of IUDs, 9(11.2%) encountered IUDs could cause a bad smell of the vagina, the others said it could cause discomfort or pain during intercourse, headache, and eat the uterus and make it thin. Also, they heard that it could disappear in the uterus Bulto *et al.*, 2014).

In addition to the above barriers, other studies have been carried out on barriers to the utilization of contraceptive services globally. In New Zealand it was found that few expectant adolescent girls attributed their pregnancies to low knowledge of contraceptive or difficulty in accessing the contraceptive services, but rather they established that pregnancies were commonly related to positive feelings about pregnancy and concluded that these positive feelings toward pregnancy interfere with effective contraception and that adolescent require motivation to avoid pregnancy rather than increased knowledge or access to contraception. Lack of concern over the possibility of pregnancy has been found to be a common barrier to effective use of

contraceptive methods. Many young mothers have failed to access contraceptives because they do not care about the possibility of becoming pregnant. Indifference also influences their use of contraceptives even when available, removing their motivation to use them effectively. Perceived low risk to pregnancy has also acted as a barrier to access and use of contraceptives. Moreover, this is a common theme among young women with irregular use of contraceptives and those who have not used contraceptives at all (Blumenthal, *et al.*, 2011).

Barriers to accessing contraceptives has been overcome in some places, using adult support, concrete sex education that is personalized to young women's experience and target contraceptive messages to young women will encourage a broad based understanding of averting unintended pregnancy as the responsibility of the community (Ochako *et al.*, 2015). The Perceived low risk of pregnancy, lack of awareness of the risk of pregnancy (as they believed that one must have several sexual intercourses before conception can occur), and several other factors on the part of young women act as barrier to accessing contraceptives and family planning services. Fear of side effect, poor knowledge of available methods and individual religion are major barriers to contraceptive use. For instance, the Catholic Church does not support the use of modern contraceptives hence a major reason for non-contraceptive use among the predominantly catholic South-Eastern region of Nigeria (Eugene, *et al.*, 2016).

Lack of knowledge of where to get a condom, not discussing family planning with a partner are barriers to family planning and risk for sexually transmitted infection among young women (Ochako *et al.*, 2015). Inaccessibility to contraceptives the major cause of unwanted pregnancy and subsequent unsafe abortion in Ethiopia (Getinet *et al.*, 2014). In many countries, access to family planning methods was initially restricted to health facilities, under the strict control of medical practitioner, eligibility criteria and constraints such as written consent of the husband, proof of marital status, age or parity, excessive revisit schedule and insistence that only menstruating women be allowed to start contraception (Cottingham, *et al.*, 2012). The success of family planning programs has been linked to dismantling administrative and medical barriers that impede quick,

convenient, and appropriate access to methods (Walraven, 2013). Static health facilities continue to be the dominant source of family planning and geographical access is considered a possible major constraint on the uptake of services.

In most societies women are found to be prepared to travel long distances for advice and contraceptives, especially for methods which require infrequent or no further visits. Poor service quality is a major constraint to effective access to family planning programs. Some aspects are continuity of supplies, presence and competence of staff, and treating patients with dignity and reasonable privacy (Board, 2014). However, in Sri Lanka the main barrier for the adolescents was the unavailability of reproductive health services, inadequate knowledge about reproductive health services, inadequate privacy and confidentiality, negative attitudes of parents and society and public health facilities that are insensitive to the need of young people are the main barriers young people face in accessing effective contraception (Chandra-Mouli, *et al.*, 2014).

Implementation of adolescent friendly services has improved access and use of services among adolescents leading to reduced morbidity from sexually transmitted infections and unwanted pregnancies (Chandra-Mouli *et al.*, 2014).

In summary, contraception has been identified as an effective means of combating the problems of unwanted pregnancy and unsafe abortion. Furthermore, the barrier methods are also useful in preventing and controlling sexually transmitted infections (STIs), including HIV/AIDS.

Although Contraceptive use has increased among young women over recent years, consistent reliance on an effective form of contraception has remained low. The reasons for inconsistency in contraceptive use are not easily characterized because they are diverse and complex.

CHAPTER THREE

MATERIALS AND METHODS

3.1 Study Design

The study employed descriptive cross-sectional survey, incorporating both qualitative and quantitative approaches.

3.2 Study Site

The study was conducted in Homa Bay County. Homa Bay County is situated along the south shore of lake Victoria's Winam Gulf. The County covers an area of 3,183.3 km² with a population of about 963, 794 people (male - 48% and female - 52%), according to the 2009 National Census. It is located about 420 km from the Kenya's capital, Nairobi.

Homa Bay borders five counties; Migori to the south, Kisii and Nyamira to the East, and Kericho and Kisumu to the northeast. Homa Bay County constitutes eight sub-Counties: Ndhiwa, Homa Bay Town, Rangwe, Rachuonyo north, Rachuonyo east, Rachuonyo south Suba south and Suba north. The population distribution of the sub-Counties is as shown in the Table 3.1.

Table 3.1: The population distribution of all the adolescent girls aged 14-19 years in Homabay County KNBS 2019

Constituency name	Population (2019 Census)
Rachuonyo North	12642
Rachuonyo South	10778
Rachuonyo East	8287
Rangwe	7615
Homa Bay Town	7218
Ndhiwa	7120

Suba North	7120
Suba South	7177

3.3 Target Population

The study targeted all adolescent girls aged 14-19 years in Homa Bay County.

3.4 Inclusion Criteria

All the adolescent girls aged 14-19 years who had lived in Homa Bay County for more than six months and emancipated minors who had given birth or were already married.

3.5 Exclusion criteria

Adolescent girls aged 14-19 who were unwilling to participate and those who could not give consent / or assent to the study. In addition, girls with severe medical conditions within the specified age group were excluded from the study.

3.6 Sample Size and Sampling Techniques
Due to limitation of studies on sexual reproductive health among teenage girls aged 14-19 years, an estimated proportion of 50% was used to determine the sample size as already described by Cochran (Anderson, *et al.*, 2016). With a 5% margin of error, the sample size was calculated as follows;

$$\text{Sample size, } n = \frac{Z^2 p(1-p)}{e^2} = \frac{1.96^2 (0.5)(1-0.5)}{0.05^2} = 385$$

Z = The Z-score of a normal curve corresponding to a 95% confidence level (1.96).

p = The estimated proportion of the population estimated to have the attribute being measured (set 50%).

e = The desired level of statistical significance (set 5%)

3.6 Sampling Method

A total of 385 adolescent girls were therefore recruited for the study. Due to vastness of the county, a proportionate based sampling was therefore used to select participant from the 8 sub-counties based on the population size per sub-county, both at the facility level and at the participant level. At the sub-county level, samples were distributed as shown in table 3.2, and within the sub-county, the number of participants were again distributed based on the volume of the teenage girls visiting the facilities.

Table 3.2: Study population and sample size

Sub county	Total Population	Proportion	Sample size
Ndhiwa	12642	18.7	72
Rachuonyo North	10778	15.8	61
Rachuonyo south	8247	11.9	46
Rachuonyo East	7615	11.2	43
Homa bay	7218	10.6	41
Suba south	7120	10.6	41
Rangwe	7120	10.6	41
Suba north	7177	10.4	40
Total	67917	100	385

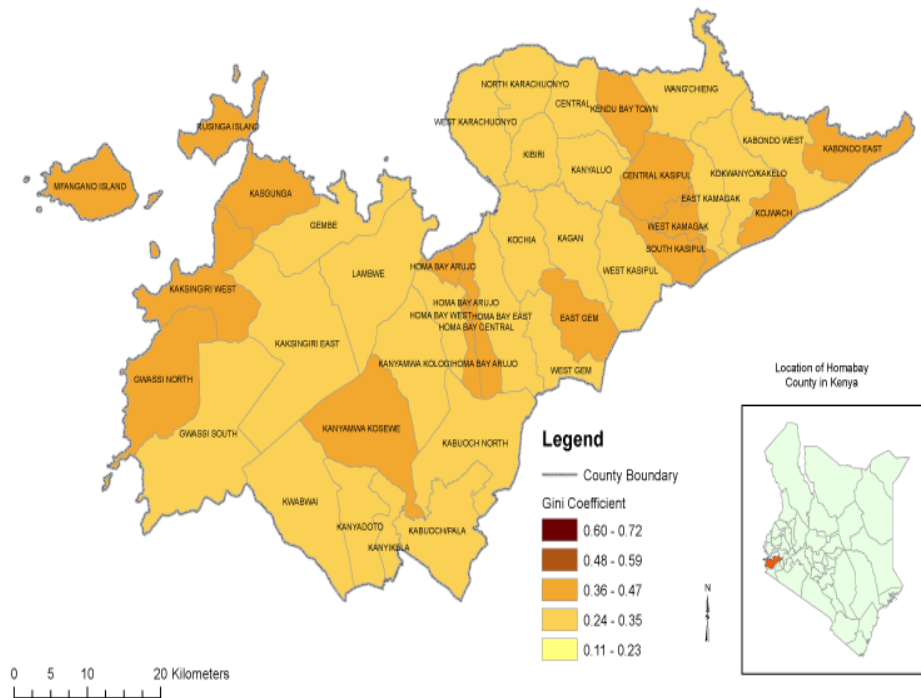


Figure 3.1: Wards in Homabay County

3.6.1 Selection of Facilities for Participant Recruitment

Once the number of participants per sub-county was identified, the number of facilities within each sub-county that were offering adolescent services was determined. Since the number of facilities per sub-county varied by the counties, proportionate based sampling was determined to arrive at the number of facilities for recruitment. With the knowledge on the number of facilities, a simple random sampling for the facilities was done by determining the n^{th} position using the formular N/n (where N the total number of facilities per sub-county and n = the proportionate number of the facilities desired for the particular sub-county). Once the n^{th} position was determined then there was spinning of the bottle and the direction of the head was followed, where the first facility was selected then facility at every n^{th} position was picked. If the facility at the n^{th} position did not have or had very few adolescents visiting, the next facility was selected.

3.6.2 Selection of Participants

Once the facilities were identified and basing on the number per sub-county, volume of the adolescents attending health services within the facility was used to determine the proportion of the participants to recruit from the specific facility. Due to sensitivity related with sexual and reproductive health services among those below the age of consent, especially with regards to contraceptive use, convenience sampling was done where participants who agreed to participate in the study for the days the recruitment was undertaken at the particular health facility, were recruited until the number of participants allocated for the facility were reached.

3.7 Data collection methods

Primary data was collected using structured questionnaires with both open and closed questions.

3.8 Data collection instrument

The study used the semi structured questionnaire to collect the data

3.9 Questionnaire

Open and close-ended questionnaires was used to collect the data. It was divided into various sections. These included questions on demographic information, on awareness of contraceptives, the level of usage of contraceptive methods, and factors affecting the contraceptive services offered to adolescent girls aged 14-19 years. Findings from review of the literature informed the questions and structuring of the questionnaire

3.10 Piloting the instrument

The researcher administered a pilot questionnaire for testing purposes. The data generated was meaningfully analyzed; this exercise was done purposely to identify any ambiguous questions for corrections.

3.11 Validity and Reliability

3.11.1 Validity of research instruments

To ensure the validity of the information, the researcher developed questionnaires with the support of his supervisor. Researcher then administered a pilot study to 10 respondents from the sample to test the instrument. Researchers administered the questionnaires with the help of trained research assistants who could speak and understand the Luo language.

3.11.2 Reliability of the research instrument

Reliability is a measure of the degree to which a research instrument yields consistent results or data after repeated trials (Bolarinwa, 2015). That is how consistent the scores are for everyone from one administration of an instrument to another and from one item to another. The researcher conducted a pilot study in which 10 respondents were selected from the target population to test the reliability of the research instruments. To test the reliability of the instruments, internal consistency techniques was applied using Cronbach's Alpha.

3.12 Data analysis and presentation

Descriptive data analysis was used to describe the relationships that existed between factors influencing contraceptive service uptake inferential statistics Pearson chi-square and logistic regression were used to test the hypotheses about the data, which then led to generalization. (Spss, 2021) was used for computation purposes. Qualitative data from the open-ended questions was analyzed thematically.

3.13 Ethical considerations

Ethical approval was obtained from JKUAT institutional Ethical Review Committee through letters and permission to approve the study obtained. The purpose and the

procedure of the study was explained, and written consent were obtained from the respondents. The respondents had the right to agree or refuse to participate in the study.

CHAPTER FOUR

RESULTS AND DISCUSIONS

4.1 Results

A total of 385 questionnaires were administered, with all of them being filled and returned. This indicated a 100.0% response rate which is ideal for the study since a response rate of above 50% is deemed acceptable to analyze and publish, that of 60% is Good and that of 70% and above very good.

4.1.1 Description of study participants

Majority of the respondents were: from Ndhiwa 72 (18.7%), were 18-19 years 133 (34.5%), had secondary education 251 (65.2%) and were not married 381 (99.0%).

Table 4.1: Demographic characteristics of participants

Background information		Frequency (N= 385)	Percent
Sub-county	Ndhiwa	72	18.7
	Rachuonyo North	61	15.8
	Rachuonyo south	46	11.9
	Rachuonyo East	43	11.2
	Homa bay	41	10.6
	Suba south	41	10.6
	Rangwe	41	10.6
	Suba north	40	10.4
Age (years)	14 - 15	111	28.8
	16 - 17	141	36.6
	18 - 19	133	34.5
Level of education	Primary school	87	22.6
	Post primary/vocational	11	2.9
	Secondary (9-12)	251	65.2
	Higher education/university/college	35	9.1
	Missing	1	0.2
Marital status	Not married	381	99.0
	Divorced/Separated	1	0.3
	Missing	3	0.8

4.1.2 Awareness of the term contraceptive use

Majority 372 (97.6%) of the respondents were aware of the term contraceptive while 9 (2.4%) were not aware of the term contraceptive.

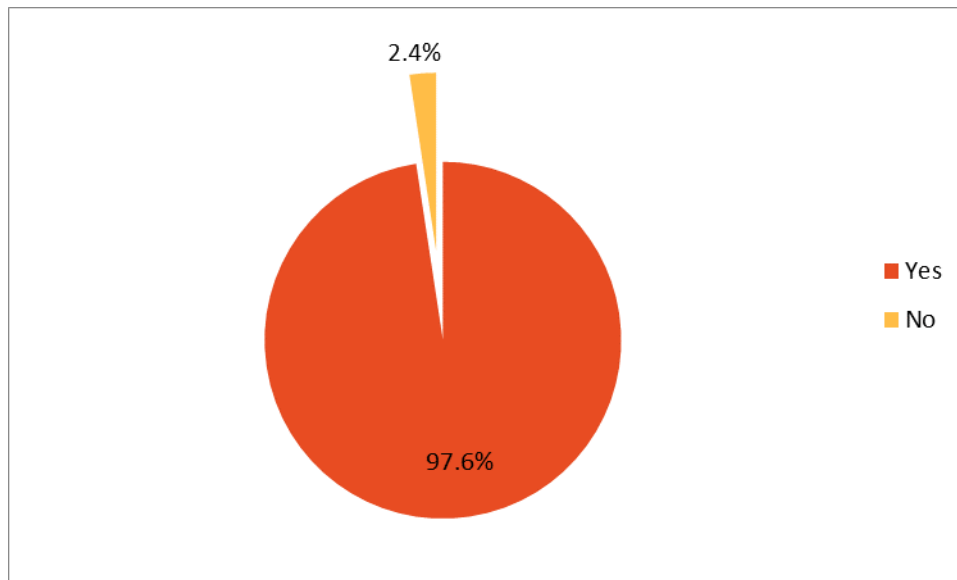


Figure 4.1: Pie chart showing awareness of the term contraceptive

When asked to elaborate on awareness of the term contraceptive, 369 (98.9%) stated that contraceptives “Prevented pregnancies” while 2 (0.5%) made it aware that they had “Heard about it but have no idea what they are for” while 1 (0.3%) said contraceptives “Prevent AIDS” and “a reason to help girls abstain.”

Table 4.2: Table showing awareness of the term contraceptive from the respondents perspective

Elaboration on awareness of the term contraceptive	Frequency	Percentage
Prevent pregnancies	369	98.9
Heard about it but have no idea what they are for	2	0.5
Prevent AIDS	1	0.3
A reason to help girls abstain	1	0.3
Total	373	100.0

4.1.3 Source of knowledge about contraceptive use

With regards to Source of knowledge of contraceptives, 124 (30.4%) heard it from school, 70 (17.2%) from peers, 61 (15.0%) from media, 51 (12.0%) from parents, 48 (11.8%) heard from groups and organizations, 48 (11.8%) from Hospitals, 3 (0.7%) from Neighbors, 2 (0.5%) from Mobilisers and 1 (0.2%) from Church.

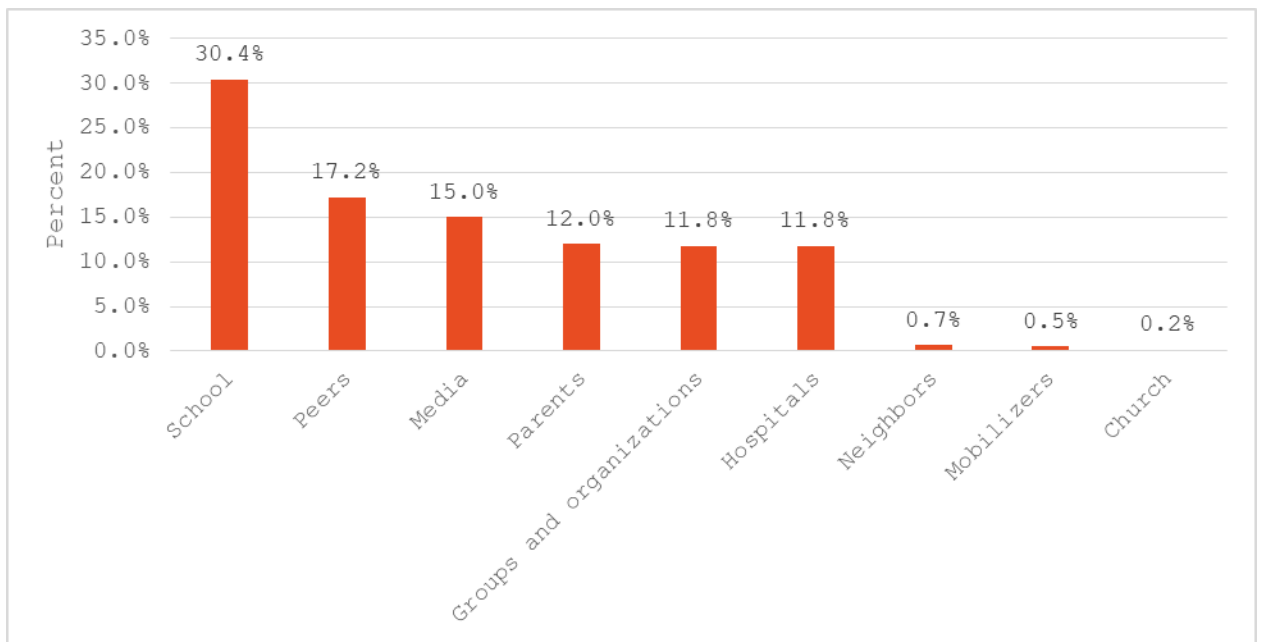


Figure 4.2: Source of contraceptive knowledge

4.1.4 Opinions about contraceptive use

Respondents had the following opinions in the light of forgoing statements regarding contraceptive use and, most of them 116 (30.1%) “agreed” that “Young sexually active girls should take contraceptives”. Despite that, 140 (36.6%) “agreed” that “as a young person, their family would not allow them to use contraceptives”, 106 ((27.7%) “agreed” that “their community will not allow them to use contraceptives”. Having said that, majority 210 (56.6%) “agreed” that “they knew how to get contraceptives”, 195 (52.0%) “agreed” that “contraceptives are available in clinics/pharmacy nearby”, and 203 (53.7%) “agreed” that “information on contraceptive is available to me”. Similarly, 171

(45.8%) “agreed” that “it is easy to get contraceptives”. Furthermore, majority 249 (64.8%) “strongly disagreed” that “contraceptive is meant for educated people” and 142 (36.9%) “strongly disagreed” that “only married women should take contraceptive”.

Table 4.3: Ratings in (%) on opinions about contraceptive use from strongly disagree to strongly agree

Statements	Rating [n, (%)]					N
	Strongly disagree	Disagree	Neutral	Agree	Strongly agree	
Young sexually active girls should take contraceptives.	90 (23.4%)	72 (18.7%)	21 (5.5%)	116 (30.1%)	86 (22.3%)	385
Only married women should take contraceptive.	142 (36.9%)	92 (23.9%)	22 (5.7%)	79 (20.5%)	50 (13%)	385
Contraceptive is meant for educated people.	250 (64.8%)	107 (27.9%)	19 (4.9%)	6 (1.6%)	3 (0.8%)	385
As a young person, my family will not allow me to use contraceptive.	59 (14.7%)	97 (25.4%)	35 (9.2%)	140 (36.6%)	54 (14.1%)	385
My family does not allow use of contraceptive.	77 (19.4%)	97 (25.4%)	26 (6.8%)	128 (33.5%)	57 (14.9%)	385
As a young person, my community will not allow me to use contraceptives.	41 (10.2%)	79 (20.7%)	133 (34.8%)	93 (24.3%)	38 (9.9%)	385
My community will not allow me to use contraceptives.	48 (11.8%)	110 (28.8%)	83 (21.7%)	106 (27.7%)	38 (9.9%)	385
I know how to get contraceptives.	15 (3.8%)	39 (9.2%)	30 (5.7%)	210 (56.6%)	92 (24.8%)	385
It easy to get contraceptives	23 (6.2%)	73 (19.6%)	42 (11.3%)	171 (45.8%)	64 (17.2%)	385
Contraceptives are available in clinic/pharmacy nearby.	8 (2.1%)	29 (7.2%)	58 (14.9%)	197 (52%)	93 (23.7%)	385
Information on contraceptive is available to me.	9 (2.4%)	65 (17.2%)	48 (12.7%)	206 (53.7%)	57 (14%)	385
Contraceptive can cause sterility	75 (20.1%)	72 (19.3%)	65 (17.4%)	99 (26.5%)	63 (16.8%)	385

4.1.5 Uptake of contraceptives

Most of the respondents 269 (70.8%) said they were in a sexual relationship with a male.

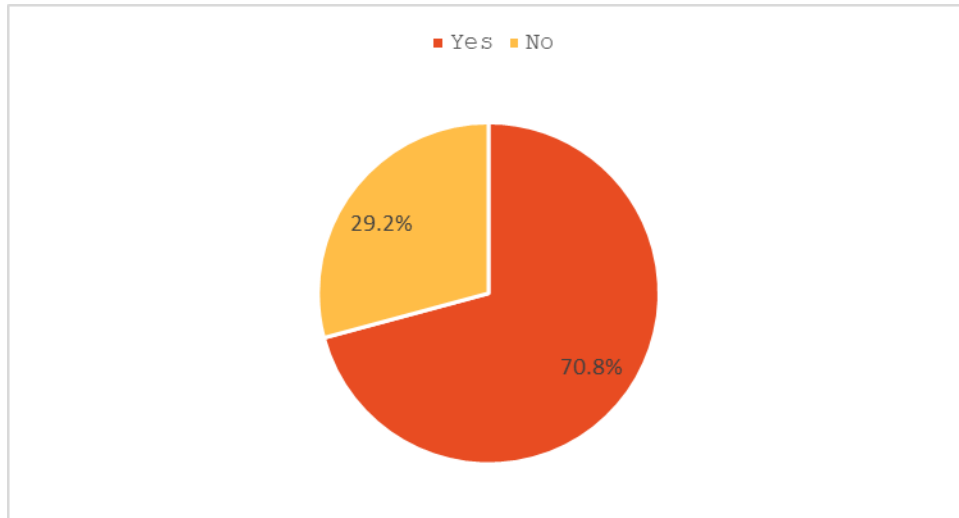


Figure 4.3: Proportion of respondents in sexual relation with male

4.1.5 Use of contraceptives

Out of the total sample of respondents, 326 (84.7%) said they use contraceptive.

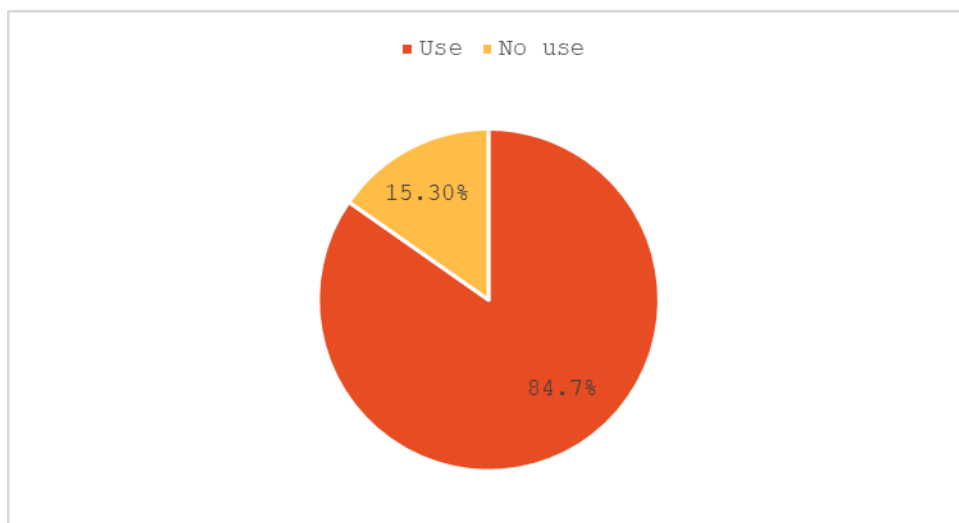


Figure 4.4: Proportion of respondents using contraceptives

4.1.6 Contraception method used at last intercourse by those who were in a sexual relationship with a male

Out of the 269 who had sexual relation with a male, 251 (93.3%) responded to the question the contraceptive method used during last sexual intercourse and the results were as follows; 147 (58.6%) said condom, 59 (23.5%) said no method, 18 (7.2%) said implants, 9 (3.6%) said safe method, 8 (3.2%) said injection, 5 (2.0%) said withdrawal, 4 (1.6%) said emergency contraception, and 1 (0.6%) said pills usage.

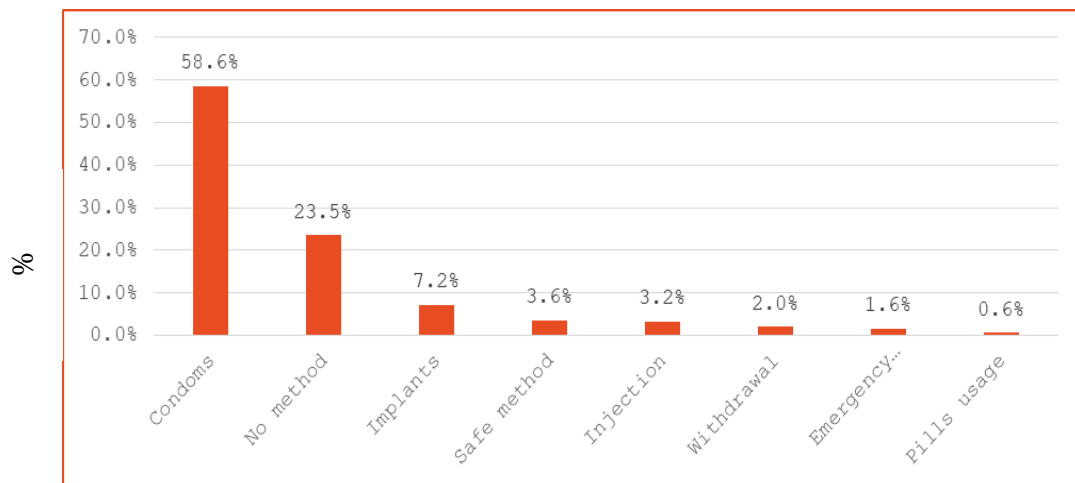


Figure 4.5: Contraceptive method used at last intercourse Ability to discuss contraceptives with sexual partner

Majority of the respondents 267 (72.0%) responded they that they were able to discuss contraceptives with sexual partner.

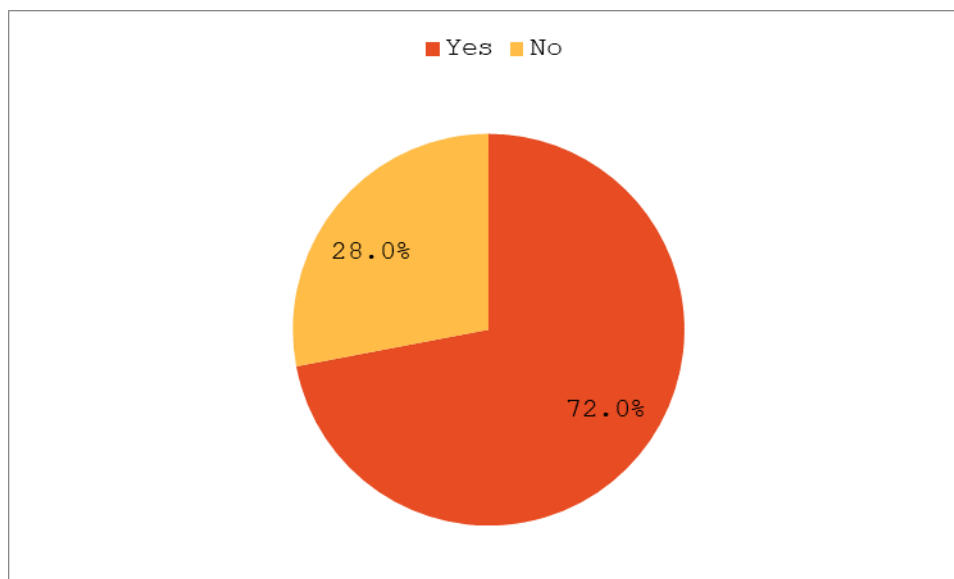


Figure 4.6:Proportion of respondents with ability to discuss contraceptives use with sexual partners

4.1.7 Reason why not able to discuss contraceptive with sexual partner

Out of the 89 who responded not able to discuss contraceptive with sexual partner, 76 (85.4%) feared discussing such issues, 6 (6.7%) had no partner to discuss with such issues, 3 (3.4%) were ignorant about such issues, and 2 (2.2%) feared side effects and had personal reasons each.

Table 4.4: Reasons for not being able to discuss contraceptives with sexual partner

Reasons	Frequency	Percent
Fear of discussing such issues	76	85.4
No partner	6	6.7
Fear of side effects	2	2.2
Ignorance	3	3.4
Personal reasons	2	2.2
Total	89	100.0

4.1.8 Major source of contraceptive among adolescent girls

Out of the total 375 who responded to this question, it was reported that the major source of contraceptive among adolescent girls was the health facilities at 289 (77.1%), 51 (13.6%) from pharmacy, 22 (5.9%) from shop, 8 (2.1%) from friends, 4 (1.1%) from organizations and 1 (0.3%) from peer educators.

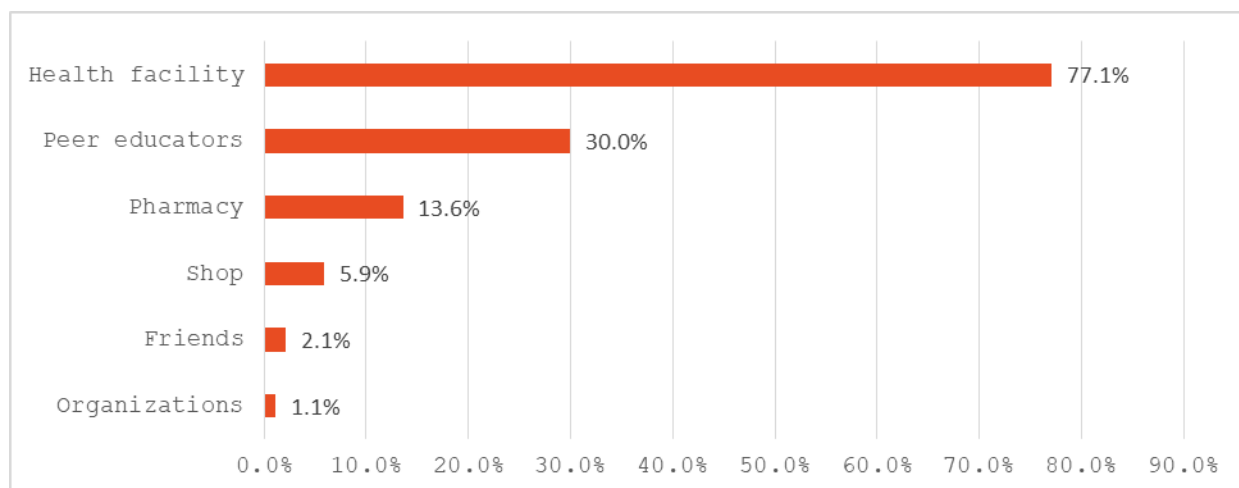


Figure 4.7: Major source of contraceptives among adolescent girls

4.1.9 Degree of contraceptive method used

Majority of the respondents responded they had never used the following contraceptive methods; 384 (99.7%) female sterilization, 384 (99.7%) for male sterilization, 380 (99.5%) for IUD, 335 (87.2%) for injectables, 301 (78.2%) for implants, 350 (91.4%)

for pills, 222 (57.8%) for male condoms, 378 (98.7%) for female condoms, 379 (99.0%) for lactation amenorrhea, 380 (99.0%) for rhythm method, 366 (9.3%) for withdrawal method, 377 (98.4%) for other modern method, 375 (99.5%) for other traditional methods, and 355 (94.9%) for no method.

Table 4.5: Rating of contraceptive methods used from Never, Rarely, Occasionally and Everyday

Statement	Rating [n, (%)]				N
	Never	Rarely	Occasionally	Every time	
Female Sterilization	385 (99.7%)	0 (0%)	0 (0.0%)	0 (0%)	385
IUD	383 (99.5%)	1 (0.3%)	0 (0%)	1(0.3%)	385
Injectable	336 (87.2%)	18 (4.7%)	15 (3.9%)	16 (4.2%)	385
Implants	301 (78.2%)	4 (1%)	19 (4.9%)	61 (15.8%)	385
Pill	352 (91.4%)	14 (3.7%)	16 (4.2%)	3 (0.8%)	385
Male condom	223 (57.9%)	32 (8.3%)	79 (20.6%)	51 (13.3%)	385
Female condom	380 (98.7%)	3 (0.8%)	1 (0.3%)	1 (0.3%)	385
Lactation Amenorrhea method	381 (99%)	2 (0.5%)	1 (0.3%)	1 (0.3%)	385
Rhythm method	381 (99%)	1 (0.3%)	3 (0.8%)	0 (0%)	385
Withdrawal method	367 (95.3%)	10 (2.6%)	8 (2.1%)	0 (0%)	385
Other modern method	379 (98.4%)	4 (1%)	0 (0%)	2 (0.5%)	385
Other traditional method	383 (99.5%)	2 (0.5%)	0 (0%)	0 (0%)	385
No method	366 (95%)	12 (3.2%)	4 (1.1%)	3 (0.8%)	385

4.1.10 Factors that would increase level of contraceptive use

Out of the total respondents who gave their opinion about factors that could increase level of contraceptive use among sexually active adolescent girls, the answers were as follows; 178 (42.1%) for proper sex education, 118 (27.9%) for proper orientation, 92 (21.7%) for outreach services, 25 (5.9%) for social acceptance., 5 (1.2%) for media services, 3 (0.7%) for parental involvement and 2 (0.5%) stated that young girls shouldn't use contraceptives.

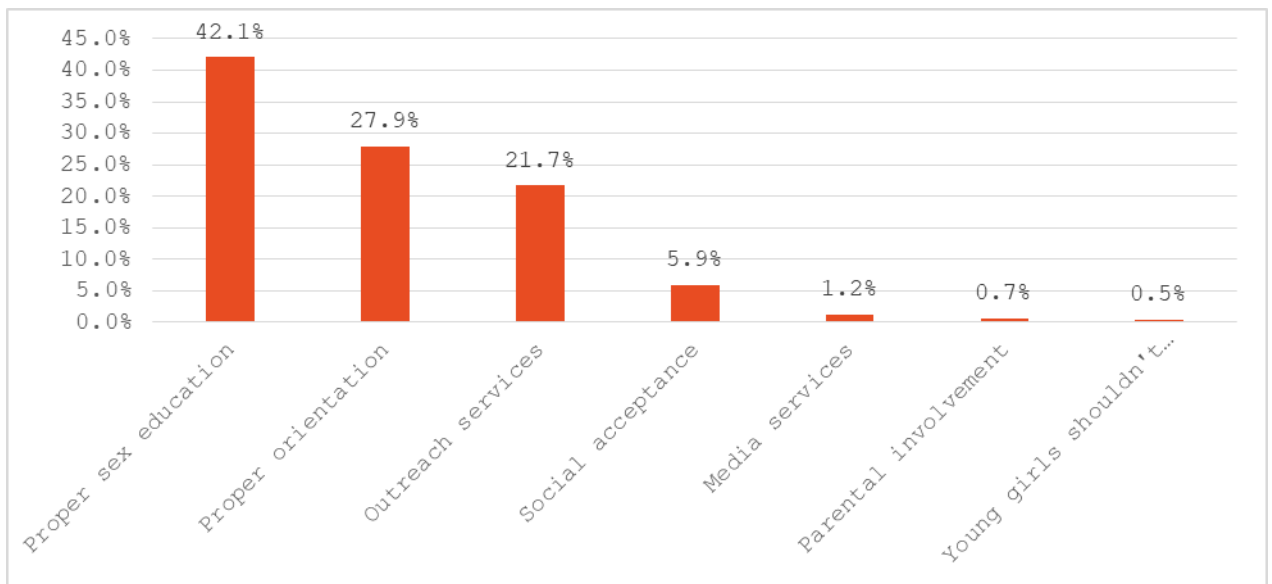


Figure 4.8: Factors that could increase the level of contraceptive use

4.1.11 Barriers to accessing contraceptive services

Responses attributed to barriers of accessing contraceptive services ranged as follows; side effects 247 (51.8%), Cultural or religious opposition 64 (13.4%), Fear of parents 48 (10.1%), Distance 34 (7.1%), myths and misconceptions 29 (6.1%), ignorance 18 (3.8%), fear of the procedure 14 (2.9%), Poor quality of available services 13 (2.7%), Infertility 4 (0.8%), Religion 4 (0.8%), Partners do not allow 2 (0.4%).

Table 4.6: Barriers to accessing contraceptive services among adolescent girls

Barriers	Frequency	Percentage
Side effects	247	51.8
Cultural or religious opposition	64	13.4
Fear of parents	48	10.1
Distance	34	7.1
Myths and misconceptions	29	6.1
Ignorance	18	3.8
Fear of the procedure	14	2.9
Poor quality of available services	13	2.7
Infertility	4	0.8
Religion	4	0.8
Partners do not allow	2	0.4
Total	477	100.0

4.1.12 Prior pregnancy

Out of 376 respondents who responded to this question, majority 315 (83.8%) reported to not have had prior pregnancy.

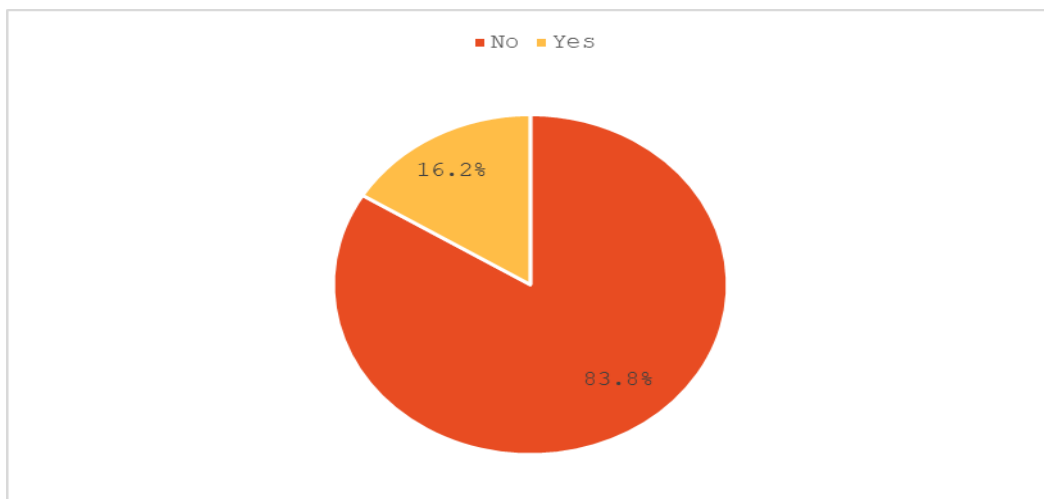


Figure 4.9: Proportion showing prior pregnancy

4.1.13 Consequences of not using contraceptives

Responses from respondents about the consequences of not using contraceptives ranged as follows; Delivered babies 318 (58.6%), Diseases 98 (18.0%), Had abortions 52 (9.6%), Unplanned pregnancies 33 (6.1%), Had still births 27 (5.0%), Dropping out of school 10 (1.8%), Early marriages 4 (0.7%), and Causes infertility 1 (0.2%).

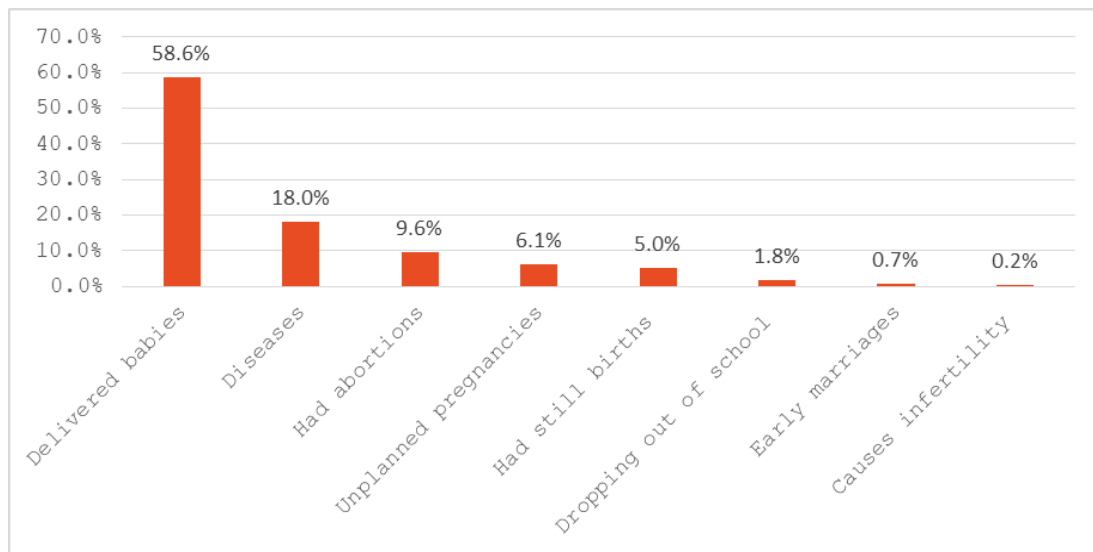


Figure 4.102: Consequences of not using contraceptives

4.1.15 Actions to be taken to reduce adolescents engaging in sex

About their opinions on actions to be taken to reduce adolescents engaging in sex, 332 (87.6%) said “Conduct health education on life skills”, 28 (7.4%) said “Involve parents”, 10 (2.6%) suggested “Abstinence”, 4 (1.1%) suggested “Punishment”, 3 (0.8%) suggested “Family planning”, 1 (0.3%) suggested “Peer pressure”, while 1 (0.3%) suggested “Praying for them”.

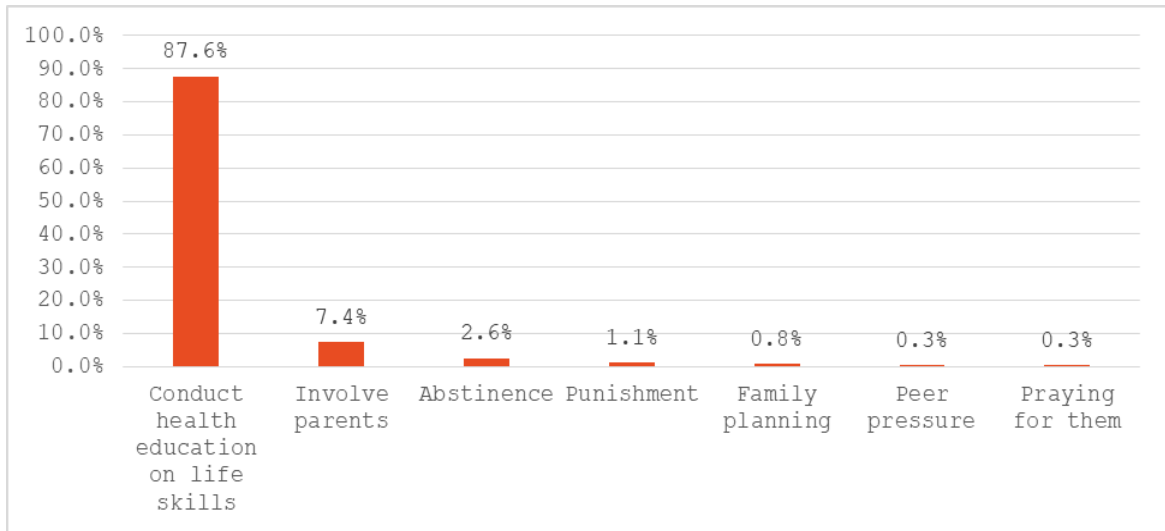


Figure 4.113: Opinions on actions to be taken to reduce adolescents engaging in sex

4.1.16 what should be done to increase usage of contraceptives?

On actions to be taken to increase the usage of contraceptives, 320 (86.0%) suggested creating awareness 40 (10.7%) suggested provision of contraceptives, 7 (1.9%) suggested “parental involvement, 4 (1.1%) suggested “non-provision of contraceptives, while 1 (0.3%) suggested using new health officers.

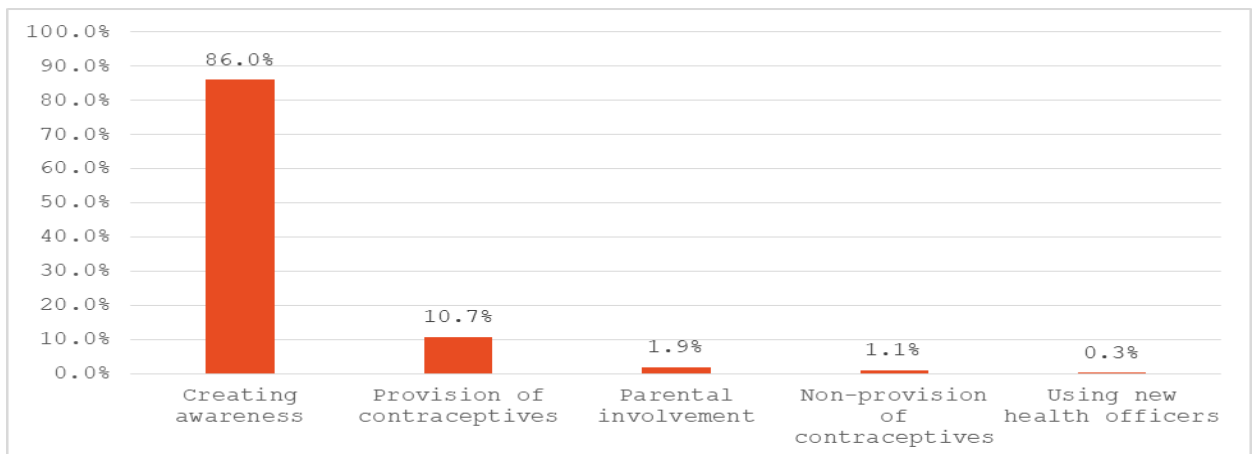


Figure 4.12: Figure showing suggestions on how to increase usage of contraceptives

4.1.17 Contraceptive use with demographic variables

The study revealed that the region or place whether rural or urban/ island or main land, the age and education level will greatly influence the contraceptive use of the adolescent girls in Homa bay county. The girls in the island compared to those in the main land are less likely to use contraceptive $P = 0.001$. It worth to note that marital status of the girl does not affect the contraceptive use with $P = 0.0675$.

Table 4.7 Contraceptive use with demographic variables

Contraceptive use	Yes, 326 (84.7%)	No, 59 (15.3%)	Chi-square/Fisher's test, p-value
Sub-county			
Ndhiwa	65 (90.3%)	7 (9.7%)	0.001
Rachuonyo North	128 (85.9%)	21 (14.1%)	
Rachuonyo South	1 (100.0%)	0	
Rachuonyo East	0	0	
Homa Bay	38 (92.7%)	3 (7.3%)	
Suba South	34 (82.9%)	7 (17.1%)	
Rangwe	36 (87.8%)	5 (12.2%)	
Suba North	24 (60.0%)	16 (40.0%)	
Age category (years)			
14 – 15 years	87 (78.4%)	24 (21.6%)	0.087
16 – 17 years	122 (86.5%)	19 (13.5%)	
18 – 19 years	117 (88.0%)	16 (12.0%)	
Level of education			
Primary school	65 (74.7%)	22 (25.3%)	0.027
Post primary/vocational.	9 (81.8%)	2 (18.2%)	
Secondary (9-12	219 (87.2%)	32 (12.8%)	
Higher education/university/college	32 (91.4%)	3 (8.6%)	
Marital status			
Not married	324 (85.0%)	57 (15.0%)	0.675
Divorced/Separated.	1 (100.0%)	0	

A total of 32 health facilities were proportionately selected based on the number of the facilities per sub county in Homabay county to evaluate the factors that affect the contraceptive services being offered to adolescent girls a check list containing the parameters on the family planning commodities available in the stock cards, the question on the cost of contraceptive services at the specific health facility was recorded, as well reviewing any record of staff training on Contraceptive technology update. The facility tour done to assess and capture the availability of the separate room dedicated for the youth's clients and whether the facility is operational up to weekend.

The full range of modern contraceptive commodities were found to be available in only 38% of the facilities visited during the study. The Contraceptives methods assessed were male condoms, female condoms, Depo Provera, oral contraceptive pills, and Sayana press, implants and intrauterine contraceptive devices. While the majority (62%) of the health facilities visited were either lacking one or more commodities in their stock hence there was a lack of choice in the provision of contraceptive services offered to adolescent's girls.

With regards to affordability of the contraceptive services, the study established that only 18% of the facilities were providing free contraceptives services to adolescent girls in Homabay County. Although the facilities were providing information materials on contraceptive services, only 40% of the facilities visited had both physical and audio-visual materials and none of the facilities had the materials translated in both English, Kiswahili, and local language for ease of understanding by the adolescent clients

The counselling and examination rooms offered adequate privacy while the majority (88%) of the facilities had flexible opening and closing hours extending up to late evenings and weekends when youths were out of school; however, 50% (16/32) the facilities did not have separate rooms dedicated for youth-friendly services.

Table 4.8: Factors affecting contraceptive service uptake

	Response [n, (%)]		
	Yes	No	N
Availability of all the FP commodities	38%	62%	32
Cost of FP services is affordable-Free services	18.8%	81.25	32
Staff is specially trained to work with youth.	12.5%	87.5%)	32
Availability of reading materials - Audio visual & written form	40%	60%)	32
Opening hours including weekends	88%	12%	32
Separate room dedicated to youth clients	50%)	(50%)	32

4.1.18 Correlates of Contraceptive use

A significant association of contraceptive use and the sub-county was observed (Table 11), where adolescent girls from Suba North (OR = 0.2; $p=0.02$) less likely to use contraceptives compared to those from Homabay town sub-county. All other variables had no significant association.

Table 4.3: Logistic regression with contraceptive use as min outcome vs demographic variable predictors

Contraceptive use	Odds ratio (CI)	P value
Sub county		
Homa Bay	Ref	
Suba South	0.5 (0.1-1.9)	0.315
Suba North	0.2 (0.1-0.8)	0.022
Rachuonyo South	1	
Rachuonyo North	0.5 (0.2-1.8)	0.313
Ndhiwa	0.9 (0.2-3.3)	0.824
Rangwe	0.7 (0.1-3.0)	0.595
Age group		
14 – 15 years	Ref	
16 – 17 years	1.2 (0.6-2.5)	0.593
18 – 19 years	1.1 (0.5-2.4)	0.818
Education level		
Primary school	Ref	
Post primary.	1.4 (0.3-6.0)	0.670
Secondary	1.7 (0.9-3.3)	0.109
Higher education	3.3 (0.7-16.5)	0.138

4.2 Discussion

The study assessed the awareness of contraceptive services among adolescent girls in Homa Bay County, by answering questions about knowledge of contraceptive services and analyzing the responses. The study reveals high awareness of 97.6% of girls having knowledge of contraceptives. Despite the high level (97.6%) of awareness, with up to 98.9% being able to elaborate on contraceptives, only 30.1% believed that adolescent girls should take contraceptives, even though at least 56.6% of these girls knew where to get the contraceptives. The perception of contraceptive uptake was strengthened by the fact that only 36.9% disagreed with the perception that married women should only use contraceptives. On the factors that determined the awareness, the study shows that education level greatly impacted awareness of contraceptives among adolescent girls as well is the region where an adolescent comes from. It is noted that the highest number of respondents in this study were in their secondary school and age bracket 16 – 17 years which accounted for 37% of the respondents.

It is therefore important to note that the population by Kabiru and Orpinas (2009) would be similar to this study in many aspects. Indeed, other studies (Yaya & Bishwajit, 2018) have demonstrated that the average age at first sexual activity, among girls, at 16 years. The finding of 70.8% of adolescent girls in a rural county is significant in that such adolescents require immediate sexual and reproductive health interventions, as many studies and programs in Kenya have focused on urban and city dwellers (Wilson *et al.*, 2020; Kabiru and Orpinas, 2009; Beguy *et al.*, 2009) Teachers in schools, (30.1%), peers, and the media were the most common sources of information. Awareness positively influences the uptake of contraceptive services as revealed in this study. This finding is in line with other studies Mac, quarrier, 2014 where women with higher education with access to information were found to be more likely to use contraceptives than their counterparts with low education with limited access to information. It is worth noting that most respondents were between the ages of 16 and 17 in secondary school. Although the facilities provided information materials on contraceptive services, only

40% of the facilities visited had physical and audio-visual materials. None of the facilities had the materials translated into English, Kiswahili, and the local language for ease of understanding by the adolescent clients.

This study revealed a high number of girls (70.8%) aged between 14 – 19 years old engaging in sexual activities with their male counterparts. This finding was in sharp contrast to other studies in Nairobi County (Kabiru & Orpinas, 2009) which have shown significantly lower (11%) adolescent girls reporting having engaged in sexual activity. Although the latter study was only conducted among adolescents in high school, it is noted that the highest number of respondents in this study were in the age bracket 16 -17 years which accounted for 37% of the respondents. It is therefore imperative to note that the population in the study by Kabiru and Orpinas (2009) would be similar to this study in many aspects. Indeed, other studies (Yaya & Bishwajit, 2018) have demonstrated the average age at first sexual activity, among girls, at 16 years. The finding of 70.8% of adolescent girls in a rural county is significant in the fact that urgent measures on sexual and reproductive health (SRH) be put in place for such adolescents since many studies and programs in Kenya have concentrated in the urban and city dwellings (Wilson *et al.*, 2020; Kabiru and Orpinas, 2009; Beguy *et al.*, 2009). Further, the rates of unintended pregnancies in rural Kenya remain high (Omoro *et al.*, 2018) with some studies showing that more than 40% of adolescent girls below 19 years who engage in sexual activity end up with unintended pregnancy (Taffa *et al.*, 2003).

Despite the high level of contraceptive awareness, most adolescent girls believed that they should not take contraceptives, a finding similar to KDHS 2022, where only 31 % of the adolescent girls aged 15-19 years in Homabay County were already using modern contraceptive methods. In this analysis, the perception by these adolescent girls seems to be driven by the fear of either family or community repercussions. Such fear exposes these girls to the mercy of their sexual partners, as demonstrated in this study, where 58.6% of the girls relied on the use of male condoms by their partners in their last intercourse, 23.5% not relying on any contraceptive, while still others depending on

unreliable methods such as safe days or calendar, withdrawal and emergency contraceptive methods.

The dependable modern contraceptive methods, such as intrauterine contraceptive devices (IUCD), Injectable, Implants (7.2%) Pills, and Female condoms, were either used minimally or were not used at all, mainly due to the perceptions highlighted. Indeed, some studies in Kenya have found that unfavorable perceptions among parents, teachers, and adolescents themselves have contributed to low contraceptive uptake (Kinaro *et al.*, 2015), with the general perception that contraceptives are only for the married highly exemplified (Mwaisaka *et al.*, 2021). Perception, as opposed to barriers, have been documented as a major contributor to low contraceptive uptake (Kinaro *et al.*, 2015). A finding that was corroborated by the findings in this study, where out of those girls who used contraceptives, 76% easily discussed the issue of contraceptives with their sexual partners. Driving the negative perception also seemed to be the aspect of fear and stigma associated with the use of contraceptives. As found in this study fear revolved around (mis)information about the side effects (51.8%), fear of parents (10.1%), and fear of procedures, In contrast, stigmatization was centered around cultural and religious perceptions of contraceptives (13.4%) and misconceptions (which mainly contributed to self-stigmatization) at 6.1%. Fear, misconceptions, and side effects have been established to be major hindrances to the uptake of modern methods of contraception (Juma *et al.*, 2013 in Kenya, not just by adolescent girls but also by the general population.

Data on stigma on contraceptives in Western Kenya Meurice *et al.*, (2021) established that 43% of the respondents associated the use of contraceptives with sexual promiscuity, whereas 51% believed that users of contraceptives would encourage their peers to live the same lifestyle of sexual promiscuity. Of the same respondents, 57% believed that contraceptives should only be used by married women, while 50% believed that a girl could not decide on the use of contraceptives. Other stigma associated with contraceptive use. In the study by (Meurice *et al.* (2021), other stigma associated with

contraceptive use included the notion that they impair future fertility, registered by 57% of the respondents. Such levels of stigmatization have also been recorded for Homabay County. The county is unique in its social, economic, and demographic characteristics; these vary from one sub-county to another.

The main sub-counties of Homabay County are Rachuonyo, Homabay, Ndhiwa, and Suba sub-counties, hived from the eight sub-counties mainly due to their similarities, close radius, and cross dependence to one another in terms of sharing social amenities such as schools, markets, hospitals, etc. The Rachuonyo and Ndiwa Sub counties are majorly rural and Peri-urban, with moderately high rainfall throughout the year suitable for agriculture. Rachuonyo is well known for growing sweet potatoes, while Ndhiwa is for sugar production for sale in local and regional markets. 58% of the Homabay county total population (KNBS, 2019) originates from the two sub-counties with a total fertility rate of 3.9 (KDHS, 2022) and a youthful population of 36% (KNBS, 2019). Homabay sub-county on the other hand is mainly urban situated along with the shore of Lake Victoria and is strategically located in the region acting as a transport hub to many destinations to other parts of the county and beyond. It connects Kisumu city and Tanzania via the Isbania border in Migori County.

The Sub-county is economically dependent on transport business, like Boda Is Bania riders, fishing and fish trade (Jaboya) in Luo language where sex is exchanged for fish resulting in many young girls ending up being married to older men, early pregnancy and hence high school dropout among girls (APRHC, 2012). The sub-county also records a high HIV prevalence rate and sexually transmitted infections. The Suba sub-counties are mainly found on the island of Lake Victoria with the major's ones being Rusinga, Mfangano, Remba, and Migingo islands. These areas have poor transport connectivity and mainly the inhabitants use boats and ferry for transport, few schools, health facilities and have very independent administrative structures and lifestyle. The beach management unit manages the residences (BMU), and fishing is the main economic activity.

These study findings show differences in contraceptive uptake levels varying from one sub-county to another with adolescent girls in Suba sub-counties in the islands being vulnerable and are at a higher risk of sexually transmitted infections including HIV/AIDs and unintended pregnancy than their counterparts in other parts of the county. Suba has an (OR. 0.27 p-value 0.0036) meaning that the girls in this area are 80% unlikely to use contraceptives compared to the same girls in Homa Bay county. This finding is supported by KDHS 2022 data which show a high teenage pregnancy prevalence of 23% in Suba compared to 18% in Homabay. The low contraceptive uptake (7.2%) reported using implants, 23.5 % no method, while 3.6 % of adolescents were using safe days as a way of preventing pregnancy. This could be attributed to the social-economic disparities that exist between the island and mainland counties.

On the island, there is a shortage or lack of contraceptive commodity supplies in the facilities making it difficult for adolescent girls to access to a wide range of modern contraceptive methods. This low supply could be due to poor transport network, especially the girls who live on the island that only dependent on small boats for their transport and few health facilities 3 out of 32 sampled were on the island as well as a lack of trained health care providers who perceive working on the island as a hardship area. The opening hours are quite different, where facilities on the island close much earlier at around 1 pm compared to the mainland facilities which operate until 5 pm Monday to Friday. These factors could jeopardize the right to offer quality, equitable, and access to essential health services to vulnerable and hard-to-reach populations. This study also reveals the disparities in the number of adolescents who were enrolled in secondary and university at the time of the study between the mainland sub-counties and the island, where (61%) of the respondents were from the mainland while 54 (14%) were from Island Sub counties.

CHAPTER FIVE

CONCLUSIONS AND RECOMMENDATIONS

5.1 Conclusion

The study noted high level of contraceptive awareness associated with lack of standardization of the contraceptive knowledge among adolescent girls in Homabay County. The study also revealed that despite high contraceptive awareness, this did not translate into use of modern contraceptive methods where by known contraceptive methods such as intra uterine contraceptive devices, implants and injectable were poorly utilized. The adolescent girls majorly use condoms as agreed with their sexual partner. The perception as opposed to barriers was a major factor to low contraceptives use hence key drivers to low uptake of contraceptives services, by adolescent girls. Adolescents specifically from the island communities in the region were at more risk of low uptake of contraceptives compared to the girls residing on mainland. The barriers such as poor transport connectivity, poor supply of essential health commodities in the region and lack of access to health education, continue to expose adolescent girls in this region to a higher risk of sexually transmitted infections, including HIV, unintended pregnancies, early marriages and a high rate of school dropout. Policies and procedures were noted to be in place although not clearly understood by adolescent girls and health providers to address youth.

5.2 Recommendations

- There is a need to standardize the health education and information on contraceptive services among adolescent girls and integrate the contraceptive services package into school health & education policies.
- The need to promote the use of common modern contraceptive methods among adolescent girls aged 14-19 years and explain the importance of

using the dual protection method in order to address the high HIV teenage pregnancies prevalence in the Homa bay county.

- There is need to enhance the capacity of the health facilities in terms of training of health care providers on common modern contraceptive services and to improve contraceptive commodity supplies in order offer contraceptive choices to the adolescent girls in Homa bay County.

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APPENDICES

Appendix I: The Questionnaire tool



Questionnaire.docx

Appendix II: The Institutional ethics review Committee approval letter



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Appendix III: The informed Consent Form



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