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FACTORS INFLUENCING ADOLESCENTS USAGE OF MODERN CONTRACEPTIVES IN THE NABDAM DISTRICT

BY

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DECLARATION

I, Ayinne Agambila Angela hereby declare that this submission is my own work and that to the best of my knowledge, it contains neither material previously published by another person nor material which has been accepted for the award of any degree in this University or elsewhere except where due acknowledgement has been made to that effect.

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DEDICATION

I dedicate this work to my late husband Rexford N. Atanga, our lovely son Tedmund N. Atanga and my mum Mrs. Alice A. Ayinne.
ACKNOWLEDGEMENT

I am very much thankful to the Almighty God for the protection, provision and guidance and direction throughout the challenging and stormy moments of this course. My God, I am a very big testimony of your wonder. My God, you are truly a faithful Father. My sincere and unseizing gratitude goes to my supervisor, Dr. John Kuumuori Ganle, for his directions, suggestions and unfailing guidance together with the numerous efforts he put to ensure that my research is done well done. With a heart full of gratitude, I say a very big thank you to all staff of the School of Public Health, most especially, to my lecturers for the inspiration, encouragement and knowledge imparted in me during this one year of study. My sincere appreciation goes to my family most especially, my mum for her love and care, especially, for taking care of my son, your grandson while I am in school, I say God richly bless you, mum. To my brother and his wife, I say I appreciate their efforts towards my son while I am away.

My profound gratitude also goes to my course mate and friend, Thierry Kalonji Mukendi for his encouragement, guidance and support in my study, God bless you. I say a big thank you to all my friends and course mates who might have inspired me in any way during my study. May God keep us safe and lift us to higher grounds.
ABSTRACT

The use of modern contraceptive among adolescents is still low in many low – income countries, including Ghana. Despite the low level of contraceptive prevalence among adolescents and the high teenage pregnancy rates, few studies have been done especially in the Nabdam district of Ghana, to examine the factors that influence modern contraceptive use among adolescents in the Nabdam district, an area where teenage pregnancy is high. This study aimed to determine the factors that influence adolescents’ usage of modern contraceptives in the Nabdam district.

A cross sectional survey design was employed. Structured closed ended questionnaire was used to collect data on adolescents’ knowledge, use of modern contraceptives and their sexual behaviors. Descriptive, bivariate and logistic regression analytic technique was used to analyze the data. Results shows that, 87.6% respondents had heard about modern contraceptives. Notwithstanding this, modern contraceptive usage among adolescents in the Nabdam district is low.

Among contraceptive users (22.0%), 54.4% used long term contraceptive methods where as 45.6% used short term methods. Socio – demographic factors that were significantly associated with modern contraceptive use included age, marital status and educational status. Other factors such as religious beliefs, peer influence, partner consent, perception of society (stigmatization), availability of modern contraceptives and positive attitude of health workers were also significantly associated with modern contraceptive use.

Based on these findings it is recommended that, both GHS and GES intensify education on adolescent sexual and reproductive health in both communities and schools, also, GHS should organize training on customer care and Behaviour Change Communication (BCC) for health
workers among others. This will enhance an increase in the prevalence of modern contraceptive use among adolescents.
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LIST OF ABBREVIATIONS

ANC  Ante natal care

ASRH  Adolescent Sexual and Reproductive Health

COC  Combined Oral Contraceptive

GDHS  Ghana Demographic and Health Survey

GES  Ghana Education Service

GHS  Ghana Health service

GSS  Ghana Statistical Service

HIV  Human Immunodeficiency Virus

IUD  Intrauterine Device

JHS  Junior High School

LAM  Lactational Amenorrhoea Method

LARC  Long acting reversible contraceptives

LMICS  Low and Middle Income Countries

NDHA  Nabdam District Health Administration

PNC  Post-natal care

SHS  Senior High School
STI

Sexually Transmitted infection

UNFPA

United Nations Population Fund

UNICEF

United Nations Children’s Fund

WHO

World Health Organization
CHAPTER ONE
BACKGROUND

1.1 Introduction

Globally, 1.25 billion of the population constitute adolescents. Adolescents aged 15 – 19 years constitute 513 million of this population and 85% of the 513 million adolescents live in developing countries. (Feleke, Koye, Demssie, & Mengesha, 2013)

According to the WHO, adolescence is a challenging developmental stage of life where adolescents engage in high risk behaviour and are vulnerable to sexual exploitation (WHO 2016).

Age 15 – 19 years is the stage that majority of adolescents start to fervently study their sexual orientation (WHO 2016). Worldwide, majority of adolescents indulge in sexual activities before they are 20 years (Parks & Peipert, 2016). In sub-Saharan Africa, seventy five percent of young ladies are reported to have had sex by age 20 (Ramjee & Daniels, 2013). Unsafe sexual relationship among adolescents can result in unintended adolescent pregnancy, often considered a crucial social and public health concern (Gomes et al., 2006; Mestad et al., 2011). The promotion of contraceptive use among adolescents is therefore important in enhancing adolescent sexual and reproductive health (Bearinger, Sieving, Ferguson, & Sharma, 2007). It is estimated that unintended pregnancies would drop by 83%, from 18 million to 3 million and unsafe abortions would also decline by 84% from 5.7 million to 0.9 million) if there is the provision of full modern contraceptive together with adequate health care (UNFPA, 2014). It is similarly estimated that maternal deaths would drop by 698 (from 183,000 to 58,000 per year) and newborn death would decline by 82% (from 1.2 million to 213,000) if there is the provision of full modern contraceptive together with adequate health care (UNFPA 2014).
Research also shows that contraceptive use is useful for the wellbeing of women and key at achieving HIV prevention goals (UNAIDS, 2014). It is reported that, it cost less to prevent the delivery of HIV positive babies by providing contraceptive to women generally, compared to increasing the supply of Nevirapine for HIV positive women within antenatal care (UNAIDS, 2014). In sub-Saharan Africa, issues of adolescent sexuality have raised a lot of concern in view of low contraceptives use, resulting in unintended pregnancies, unintended abortions and issues of sexually transmitted infections (STIs) including HIV/AIDS (FHI, 2016). For instance, 75% of adolescents are reported to have had sex by age 20 years (Lloyd, 2005). Nevertheless, a small number of sexually active adolescent in underdeveloped countries use contraceptives like condom and oral contraceptives (FHI, 2016). The use of contraceptives is generally much lower in underdeveloped countries than it is in developed countries (FHI, 2016). In U.K, 69% of adolescents use contraceptives compared to 12% of usage among adolescents in Mali (Williamson, Parkes, Wight, Petticrew, & Hart, 2009). It is said that, approximately 37% of single sexually active females aged 15 – 24 years in sub-Saharan Africa use contraceptives with 8% using a non-barrier method (Williamson et al., 2009).

In Ghana, the issue of low contraceptive use is also a public health challenge. The use of contraceptive among women in their reproductive age (15 – 49 years), currently stands at 23% (GSS et al., 2014). Among married adolescents of age 15 – 19 years, the prevalence of contraceptive use is 19% (GSS et al., 2014). However, 27% of currently married women and 45% of unmarried sexually active women aged 15 – 49 are using contraceptives (GSS et al., 2014). Among married women, 22% are using modern contraceptives while 5% are using the traditional method (GSS et al., 2014). There is however low usage among women within age 15 – 19 years recording 19% (GSS et al., 2014). These statistics clearly highlight the need for continuous research to examine the factors influencing the use of modern contraceptives among adolescents across sub-Saharan Africa more generally and in Ghana more specifically.
1.2 Statement of The Problem

Globally, it has been recognized that contraceptive use allows women, especially adolescent girls, to delay motherhood or childbearing, space births or even put an end to childbearing (Finer & Philbin, 2013). The use of contraceptives also reduces unintended pregnancies and abortion (Cleland, Ali, Shah, 2006). Despite the benefits that could be had from adolescents’ use of modern contraceptives, in low-income settings, few adolescents use modern contraceptive (WHO, 2011). This is obvious in sub – Saharan Africa, where unplanned pregnancies and child bearing among adolescent continue to be of great concern (Nyarko, 2015). According to Nyarko (2015), adolescents’ sexual and reproductive health is highly seen as a moral issue in many communities of sub – Saharan African settings.

Although in many regions of sub – Saharan Africa, there has been some improvement, there are still challenges related to access and knowledge of contraceptive among adolescents (UNICEF, 2011).

The Upper East region of Ghana is one of the regions where contraceptive uptake is an issue of concern. The region has a total fertility rate (TFR) of 6.2, much higher than the national average of 4.2 (GSS et al., 2014). Among every 100 adolescents, there are three (3) births, and between 2012 and 2014, the region’s adolescent pregnancy rate stood at 15%, which was higher than the national adolescents pregnancy rate of 14%, though the region recorded a contraceptive prevalence rate (CPR) of 23.7 % (GSS et al., 2014). The Nabdam district particularly demonstrates some of the worse indicators of adolescent sexual and reproductive health. The districts TFR is 6.6, a rate higher than both the regional and national figures of 6.2 and 4.2 respectively (GSS et al., 2014). The district recorded 244 (22.3%) adolescent pregnancies out of a total of 1096 antenatal care (ANC) registrants in 2015 and 166 (32.1%) of a total of 517 ANC registrants by mid-year 2016 (NDHA, 2016). The district also recorded 122 (23.9%) adolescents (15 – 19 years) out of a total of 511 contraceptive users in 2015 but in 2016
(mid-year), there was a very low proportion of contraceptive use in the district - 60 (15.4%) adolescents aged 15 – 19 years out of a total 389 contraceptive users (NDHA, 2016). The growing numbers of pregnant adolescents and the concomitant low use of modern contraceptives in Nabdam district demonstrate the for addressing adolescent sexual and reproductive health needs is critical. This is more so because the district has family planning programmes which allows sexual active individuals and couples access to contraceptive services without considering age (NDHA, 2016). There is also the school health program, which carries out activities on adolescents’ sexual and reproductive health to help address adolescents’ reproductive health needs.

Studies in other parts of sub-Saharan Africa such as Uganda, have examined contraceptive use among youth (15 – 24 years) and found that factors associated with contraceptive use among the youth included; limited contraceptive options, absences of counseling on contraceptive effectiveness, inconsistent supply of contraceptives, negative attitude of service providers, providers misconception toward young and unmarried peoples use of contraceptives as well as age, sex and marital status (Koyango, 2013), another study carried out in southern Ethiopia by Mekonnen et al., (2014) revealed that knowledge of contraceptive and age of women had significant association with use of long acting and permanent contraceptive. Also in Amhara Region in Ethiopia, a study showed that some determinants of modern contraceptive use by women were because of the involvement or consent of their partners (Mohammed et al., 2014).

In Ghana, a study by Nyarko (2015) on the prevalence and correlates of contraceptive use among female adolescents revealed that factors such as adolescent age, marital status, religious affiliation, ethnicity, and education, and work status, visit to health facility and knowledge of ovulatory cycle significantly determined use of contraceptives by adolescents. While all these studies have provided useful information on adolescents’ contraceptive use behaviors, it is not
entirely clear whether the factors that have been identified elsewhere in previous studies hold true for adolescents in the Nabdam district. At the same time, there are no published studies that have examined the use of contraceptives by adolescents in the district.

1.2.1 Main objective

The main objective of the study was to examine the factors influencing adolescents’ usage of modern contraceptives in the Nabdam district.

1.2.2 Specific Objectives

The specific objectives of the study were to:

1. Assess awareness and knowledge of modern contraceptive among adolescents.
2. Determine modern contraceptive use prevalence among adolescents.
3. Assess the proportion of adolescents who use short or long term modern contraceptives.
4. Determine the factors influencing modern contraceptive use among adolescents.

1.3 Research Questions

1. What is the level of awareness and knowledge of modern contraceptive use among adolescents?
2. What is the prevalence of modern contraceptive use among adolescents in the Nabdam district?
3. What proportion of adolescents use short or long term modern contraceptive?
4. What are the factors influencing the use of modern contraceptives among adolescents in the Nabdam district?
1.4 Rational of Study

This study sought to determine the factors that are associated with adolescents’ use of modern contraceptives. The study also sought to provide some insight on the sexuality and contraceptive use behaviour of adolescent. The findings would potentially help identify challenges in rendering contraceptive service to adolescents as well as opportunities for addressing the reproductive health needs of adolescents’ in totality especially the contraceptive needs of the adolescent. This would inform programming to improve contraceptive service provision to adolescents to help curb or minimize unintended pregnancies, unsafe abortions, early marriages as well as school drop-out. The findings of this study may equally serve as a road map for strengthening future development of health service delivery to the adolescent and as well guide the ministry of health and other health partners or NGOS in planning how to develop programmes and activities especially for dual protection and prevention of STIs, including HIV/AIDS.

1.5 Conceptual framework on factors influencing adolescents use of modern contraceptives.

Previous studies in Sub-Sahara Africa have shown that there are lots of factors influence the use of modern contraceptives by adolescents which include knowledge of contraceptives, fear and about side effect, family related factors, religion, sex education, poor access to services, low socio-economic status, attitude of service providers, perceptions of service providers (Koyango, 2013). Religion has also been a barrier for contraceptive use for decades where children are regarded as gifts or blessings from God (Williamson, et al, 2009; Yoder et al, 2011).

In Ghana, adolescents taboo to talk about sexual issues, the worse aspect, is for the adolescent to make attempts to using any type of modern contraceptives (Yoder et al, 2011).
Figure 1 below shows the conceptual framework for the study. The framework illustrates the relationship between the outcome variable (modern contraceptive use) and the independent variables. Modern contraceptive use is influenced by accessibility based on the extent to which staff attitude, education and age, and service point distribution are planned to promote adolescent sexual reproductive health needs.

Poor accessibility could therefore lead to low use of contraceptives whereas the contrary would lead to an increase in use. Predictive variables such as sex education, peer influence, knowledge and use of contraceptives, societal factors and socio-demographic factors including age, marital status and religion are all factors that influence adolescent use of modern contraceptives. Societal factors include, parent or guardian, partner consent to modern contraceptive use, perceptions of the public all influence adolescent usage of modern contraceptives. In addition, socio economic status of adolescents could empower their decision-making and further suppress negative social perspective on contraceptives.
Figure 1. Conceptual framework on factors influencing Adolescent usage of modern contraceptives.
1.6 Chapter Summary and dissertation outline

This dissertation is organized into six chapters. Chapter one contains the background to the study, statement of the problem, the objectives of the study, research questions and the rational for the study. Chapter two reviews relevant literature related to the study. Chapter three deals with methods, and describes the study design, target population, sample size, sampling procedure, the data collecting tool or research instrument used, data processing and analysis, and the ethical issues arising from the research. Chapter four presents the results of the study while chapter five discusses the results of the study. Chapter six provides the conclusion and recommendations of the study.
CHAPTER TWO

2.0 LITERATURE REVIEW

2.1 Introduction

The chapter reviewed literature related to the factors influencing modern contraceptive use among adolescents. This review focused on the concept of contraception, type of modern contraceptives, sexual behaviour of adolescents, awareness and knowledge of modern contraceptives among adolescents, and factors influencing use of modern contraceptives among adolescents.

2.2 The Concept of Contraception

The concept of contraception dates to ancient time. The Book of Genesis references “withdrawal or cites coitus interruptus as a method of contraception when Onan “spills his seed” (ejaculates) on the ground so as to not father a child with his deceased brothers wife Tamar” (Coumo, 2010). Contraceptive methods such as withdrawal by the male; melting suppositories designed to form an impenetrable coating over the cervix (similar to diaphragms, caps, or other devices which are inserted into the vagina over the cervix and withdrawn after intercourse); intrauterine devices (douching after intercourse designed to kill or drive out the sperm); condoms; and varieties of the rhythm methods were all used (London, 1982). The earliest known illustration of a man using a condom is in a cave in France. It is reckoned to be 12000 to 15000 years old (“Contraception”, 2012). Coitus interruptus (withdrawal), was practiced in Africa, Australasia, the Middle East and Europe. This was condemned by Judaism and Roman Catholicism. Withdrawal method was commonly practiced in Medieval Europe and later, was frequently attacked in canonical writings as a “vice against nature” (Gordon, 1974).
Contraceptive use reduces the need for abortion by preventing unwanted pregnancies. Contraception can prevent young women from unwanted pregnancies that can affect their lives and ruin their education (Nordqvist, 2016). Eventually, in the light of the pandemic of sexually transmitted infections (STIs), involving the human immunodeficiency virus/acquired immune deficiency syndrome (HIV/AIDS), condoms provide effective protection when used precisely and regularly (Miller, Shane and Murphy, 1998). However, there are also some disadvantages of using contraceptives. For instance, common side effects of emergency contraceptive pills (ECPs) include nausea and vomiting. Women who use pills have moderately elevated risk of blood clots and certain types of stroke compared with nonusers, even though the total risk is minimal and is no longer visible when the pills are stopped (Miller et al, 1998).

2.3 Types of Contraceptives

Contraceptives can broadly be grouped under traditional and modern methods (Nordqvist, 2016). They are therefore discussed below under this categorization.

2.3.1 Traditional Contraceptives

Delano (1988) defined traditional methods of contraceptives as the practice, beliefs or customs handed down from one generation to another aimed at preventing pregnancy. Traditional methods of contraceptives include celibacy, withdrawal and fertility awareness (Hubacher & Trussel, 2015). Celibacy or sexual abstinence is the practice of avoiding sexual intercourse. Withdrawal or coitus interruptus is the practice where “the man removes the penis from the vagina so that ejaculation occurs outside of the vagina”. In theory, this serves as a barrier that prevent the sperm from being kept in the vagina (Nordqvist, 2016). Fertility awareness requires the woman to recognise the turnover of her body to be able to tell when she will ovulate to prevent sexual intercourse. She may adopt other means like observing her body temperature daily or changes in cervical mucus (Pillitteri, 2013)
2.3.2 Modern Contraceptives

Modern Contraceptive is said to be a product or medical approach that restrict reproduction with respect to acts of sexual intercourse (Hubacher & Trussel, 2015). Modern contraceptive consists mostly of contraceptives used worldwide; thus, making 90% of contraceptive users (UN, 2015). Modern contraceptives are grouped and discussed under these five broad types. They include Barrier method, Hormonal methods, intrauterine devices (IUDs), Permanent methods (sterilization) and Emergency Contraceptive Pills (ECP) (Hubacher & Trussel, 2015).

2.3.2.1 Barrier Methods of Contraception

The condom is one example of barrier method. “Condoms are thin natural latex rubber, synthetic plastic or polyurethane sheaths that provide a physical barrier to prevent the man’s sperm from entering the woman’s uterus”. There are two main types of condoms, male and female. The male condom is worn over the penis before sexual intercourse. The female condom is placed inside the vagina before any sexual act (Miller, et al, 1998). Condoms prevent sperms from meeting the female egg. Their advantages include: easily assessable (as they are found in drugs stores with no need for prescription); are 75% to 98% effective in preventing pregnancy; no need to see a health care provider and the help prevent STIs including HIV/AIDS (Hatcher et al, 2003).

Spermicides are chemicals that are placed in the vagina before sexual intercourse. They prevent pregnancy by killing sperms so that none can reach and fertilise an egg (Silber, 2009). Nonoxynol-9 (N-9) is the commonest spermicidal agent which is available in several concentrations and forms, including foam, jelly, cream, suppository, and film (NICHD, 2012).

The diaphragm is also another barrier method of contraception. It is made of a rubber and shaped like a dome that is placed over the cervix. The diaphragm acts as a “barrier to sperm to
prevent fertilization and when combined with spermicide, it has a success rate of about 84%” (Balen, 2014).

A cervical cap is yet another type of barrier method. “A cervical cap is a thimble-shaped latex rubber barrier device that fits over the cervix and blocks sperm from entering the uterus”. The cap should be about one-third filled with spermicide before inserting. It stays in place by suction (Nordqvist, 2016).

Contraceptive sponge is another example of barrier method. These are “soft, disposable, spermicide-filled foam sponges”. It is placed in the vagina before sexual intercourse. “The sponge blocks sperm from entering the uterus, and the spermicide also kills the sperm cells” (NICHD, 2012).

2.3.2.2 Hormonal Methods

Hormonal methods of contraception use hormones to control or stop ovulation and intercept pregnancy (Nordqvist, 2016). Hormones can be introduced into the body through various methods, including pills, injections, skin patches, transdermal gels, vaginal rings, intrauterine systems, and implantable rods. The pills can prevent ovulation and/or thicken cervical mucus, which helps block sperm from reaching the egg (NICHD, 2012).

Combined oral contraceptive pills (COCs) is a type of hormonal contraceptive which “contain different combinations of the synthetic oestrogens and progestins and are given to interfere with ovulation”. These hormones act together to stop ovulation (Nordqvist, 2016).

Progestin-only pills (POPs) is another hormonal method. POPs are contraceptive pills taken once a day. POPs may inhibit ovulation or sperm function. They thicken cervical mucus, making it difficult for sperm to swim into the uterus or to enter the fallopian tube. POPs alter
the normal cyclical changes in the uterine lining and may result in unscheduled or breakthrough bleeding (NICHD, 2012).

Contraceptive patch is yet another hormonal method of contraception with a thin, plastic patch worn on the lower abdomen, buttocks, outer arm, or upper body. “It releases the hormones progestin and oestrogen into the bloodstream to stop the ovaries from releasing eggs in most women. It also thickens the cervical mucus, which keeps the sperm from joining with the egg” (SyamRoy, 2016).

The contraceptive injection, or "the shot," an example of hormonal contraceptive, which is progestin-only, long-acting, reversible contraceptive. It is injected every 3 months. It stops the woman from releasing an egg, and it provides other contraceptive effects (Nordqvist, 2016).

Vaginal ring, another hormonal contraceptive, is a thin, flexible ring that releases the hormones progestin and oestrogen. It works by stopping the ovaries from releasing eggs. It also thickens the cervical mucus, which keeps the sperm from joining the egg. The ring is worn for 3 weeks, taken out the during the menstruation week. (Sultan & Genazzani, 2017). The vaginal ring is not recommended for any woman with a history of blot clots, stroke, or heart attack, or with certain types of cancer (FDA, 2011).

2.3.2.3 Intrauterine Contraceptives Device (IUD)

The IUD “is a small, flexible T-shaped device that is placed in the uterus by a health care provider. It stays in place as long as pregnancy is not desired”. (Nordqvist, 2016). An IUD can stay and function effectively for many years at a time (NICHD, 2012). IUD comes in two forms, the copper IUD and the hormonal IUD. “A copper IUD releases a small amount of copper into the uterus, causing an inflammatory reaction that generally prevents sperm from reaching and fertilizing the egg”. If fertilization of the egg occur, the presence of the device stops the fertilized egg from implanting into the lining of the uterus (FDA, 2011). A hormonal
IUD similarly, releases a progestin hormone into the uterus. “The released hormone causes thickening of the cervical mucus, inhibits sperm from reaching or fertilizing the egg, thins the uterine lining, and also may prevent the ovaries from releasing eggs”. Hormonal IUDs can be used for up to 5 years (FDA, 2011).

2.3.2.4 Sterilization

“Sterilization is a permanent form of birth control that either prevents a woman from getting pregnant or prevents a man from releasing sperm”. A health care provider must perform the sterilization procedure (NICHD, 2012). Surgical sterilization in women involves sealing the fallopian tubes, thus, they are cut and tied. This prevents the eggs from travelling to the uterus where they can be fertilized (Graham, 2016). Vasectomy in men keeps sperm from going to his penis, so his ejaculate never has any sperm in it (Yoost and Crawford, 2015).

2.3.2.5 Emergency Contraceptive Pills (ECPs)

Emergency Contraceptive Pills are “hormonal pills, taken either as a single dose or two doses 12 hours apart, that are intended for use in the event of unprotected sexual intercourse” (NICHD, 2012). They create thickening of cervical mucus and can interfere with sperm function (SyamRoy, 2016). Emergency contraception is safe and effective in preventing unintended pregnancy (Babatunde, et al, 2016).

Considering these types of modern contraceptive discussed above, these contraceptives can be further grouped in two, thus, short and long acting contraceptives.

2.4 Short term contraceptive methods

“Short term modern contraceptives are termed short term because, they have short length of efficacy to protecting the woman from unplanned pregnancies and its related consequences. It has a maximum duration between one to three weeks” (Monjok et al., 2010). The advantage of this method is that, it can easily be stopped at any point and this does not require the help of a health professional compared to the long acting reversible contraceptive method. The
disadvantage of this method is that, one can easily forget because of the mode of administration and its short length of efficacy. The factor of forgetfulness can lead to unwanted pregnancies.

2.5 Long term contraceptive methods

“Long-acting reversible contraceptive (LARC) methods are termed long because of the period or length of efficacy to protecting the woman from unplanned pregnancies and its related consequences”. LARC, as mention above in the types of contraceptives, have a maximum duration between three (3) months to ten (10) years (Monjok et al., 2010). In terms of advantage, “LARC methods are forgettable; once placed, they offer highly effective, long-term pregnancy prevention” (Parks & Peipert, 2016).

“Long-acting reversible contraceptive (LARC) methods, include intrauterine devices (IUDs) and implants, have been described as the most effective methods of reversible contraception with a failure rate of <1%” (Murphy et al., 2016).

2.6 Sexual Behaviour of Adolescents

“Initiation of sexual intercourse at an early age is a risk factor for sexually transmitted infections (STIs), including HIV” (Tenkorang & Maticka-Tyndale, 2008).

Accordingly, early sexual initiators are less likely to have knowledge on how to prevent STIs including HIV and other health related consequences of unsafe sexual behavior (UNFPA, 2013). They are equally not able to negotiate condom use compared to those who delay sexual intercourse at an early age and this poses extra risk due to their physiological immaturity and the power differences that exist between them and older male partners. (Rijsdijk et al., 2012)

Marcus & Harper (2014), highlight the danger in which adolescents place their sexual health when adhering to social norms. The high regard for preserving reputation implies that
adolescents comply with social definitions of sexual encounters as sexual intercourse is initiated by men against resistance from these adolescents (UNICEF, 2008). Hence, adolescents become increasingly sexual active, marry and bear children early in life. This demonstrates the high levels of sexual activity among adolescent thereby posing the risk behaviour of unprotected sex hence placing them at a risk of STIs, HIV and as well, unplanned pregnancy (UNICEF, 2008). The minimum age at first sex were 15.5 ±2.5 for females and 16.5±2.0 for males. Though contraceptive awareness was high (98.2% for males and 95.5% for females) among this group of adolescents, a large majority never used any form of contraceptive and this resulted to about 37% high incidence of teen pregnancy and out of this (37%), 47% reported to have had an abortion which could have claimed their lives or resulted in other complications later in life.

2.7 Awareness and knowledge of modern contraceptives among adolescents

Adolescent sex and exposure to the risk of conception has drawn reasonable research attention (Renjen et al., 2010). Acquiring knowledge about contraceptive methods is a crucial step towards gaining access to contraceptive services and adopting a suitable contraceptive method (Ghana Demographic and Health Survey [GDHS], 2014). Among youth who are indulging in sex, the use of contraceptive reduces the number of unintended pregnancies. However, before using a contraceptive, the adolescent must first have knowledge of the different methods (Dann, 2009).

According to the recent Ghana Demographic and Health Survey (GDHS, 2014), knowledge of contraception is almost universal in Ghana. The report shows that 96.5% of married adolescents aged 15-19 have some form of knowledge about at least one modern method of contraception (GDHS,2014).
According to findings from the Russia Reproductive Health Survey (2011), although the youngest women (15-24) were nearly as knowledgeable as the older groups about condoms and oral contraceptives, there was a much bigger difference between younger and older groups with all the other methods. Because female sterilization is restricted by law to women over age 35 or with two or more children, it is not surprising that this method was familiar to only 42% of women aged 15 to 24, whereas the rate was twice as high (84%) for women aged 35-44.

Lim et al, (2015) argue that among adolescent sex workers in Kunming-China, knowledge on sexual and reproductive health was poor. All adolescents had heard of condoms and 86% had heard of any other modern contraceptive method, the most common being emergency contraception- 64% and oral contraception-55%. They report that 39% had heard of any long-acting reversible contraception such as implant, injection or IUD.

Sweya et al. (2016) assess the knowledge of contraceptive use among female undergraduates in Kilimanjaro-Kenya. Their results show that contraceptive knowledge was high with 78% of respondents being familiar with condom and 60.4% reported to have heard about the pill. Other methods like intrauterine device, lactation amenorrhea, female sterilization, diaphragm, and spermicides were mentioned by only a few respondents.

Using a cross-sectional analytic study, Somba et al (2014) sampled 253 university students in Tanzania and reports that all respondents were aware of modern contraceptives. Majority (86.3%) had ever heard about condoms, 16.8% had ever heard about pills and 16.5% had ever heard injectable contraceptive method.

Hagan and Buxton (2012) use cross-sectional survey to determine the level of contraceptive knowledge among adolescence in Senior High Schools in the Central region of Ghana. Their results reveal that about 81% of the participants had some knowledge regarding contraceptive use. However, 72.3% of them were aware of modern contraception and that almost 32% of the
study participants thought contraceptives are for only adults and married persons. The most popular modern contraceptives were condom (42.3%) and hormonal contraceptives (oral and injectable 27.6%). In a similar study in Ghana, Boamah et al (2014) found that knowledge of at least one contraceptive method was high (88.9%) among adolescents of both sexes (males 92.1% and females 86.6%) in Kintampo and that the male condoms was the most popular modern contraceptive among adolescents.

In their study on awareness of modern contraception use among physically challenged in-school adolescents in Osun State-Nigeria, Oladije et al. (2014) found that only about two fifths of the physically challenged (38%) had ever heard about modern contraceptives. More males, older adolescents and visually impaired respondents had significantly heard about modern contraceptives compared with females, younger ones and those with other challenges. The study also indicates that condom was the most popular modern contraceptive among the group. However, since male (56%) was more than their female counterparts in their sample, it can be misleading to think that male had more knowledge about modern contraceptives. Babatunde et al., (2016) employ a similar cross-sectional study to determine the knowledge and use of emergency contraception among students in public secondary schools in Ilorin-Nigeria. They report that 27.8% of the respondents had knowledge of emergency contraception. They conclude that knowledge about emergency contraception and prevalence of use was low and that contraceptive education should be introduced early in the school curriculum for adolescents. In a similar study from Nigeria, Tayo et al. (2010) reveal that 76% of female students in secondary school in Lagos had heard about modern contraceptives with condom and the pill being the commonest modern contraceptives known amongst the students.

Nyongesa and Odunga (2015) in their paper articulates that there is abundant information that contraceptive knowledge and awareness is high among the Sub-Saharan Africa population. However, this awareness has not translated into increased contraceptive use thus, resulting in
very low contraceptive prevalence. They argue that this low contraceptive prevalence correlates with elevated levels of unplanned pregnancies and abortions, leading to increases in maternal mortality ratios especially in the rural areas.

2.8 Modern contraceptive use among women

Increasing the uptake of modern contraception is critical to enabling women and their partners to meet their fertility goals and to reduce unmet need for family planning (Alaii et al, 2012). In 2015, 57% of married women of reproductive age used a modern contraceptive method globally, constituting 90% of contraceptive users (UN,2015). Despite this, huge gaps remain in the proportion of total demand for contraceptive satisfied with modern methods in countries where overall contraceptive use is low or where many couples rely on traditional methods of contraception (UN, 2015). The same report asserts that female sterilization and the IUD are the two most common methods used by married or in-union women worldwide.

Assessing modern contraceptive use among women, Egzeabher et al (2015) found that about 47.9% HIV positive reproductive age women are currently using modern contraceptive methods in Northwest Ethiopia. However, they argue that utilization of modern contraceptive methods was low and that condom and injectable are the most commonly use contraceptives.

Oyedokun (2007) reports that although knowledge of contraceptive methods was high among women in Osun State, only 30.1% ever used any of the known methods and less than a tenth was currently using any modern method. Similarly, with respect to current contraceptive users, Sweya et al. (2016) found that 43.6% of sexually active women reported that they used contraceptives in the past, while 40.4% of them were current contraceptive users. The most popular methods of contraception used were condoms, withdrawal and periodic abstinence. They assert that the rate of modern contraceptive use was low.
Daniels, Daugherty & Jones, (2014) assert that approximately 38% of women were not currently using contraception in the United States. Current contraceptive use was higher among women aged 25–34 (67.4%) and 35–44 (70.0%) compared with women aged 15–24 (47.4%). They further indicate that a higher percentage of non-Hispanic white women (65.3%) were currently using contraception compared with Hispanic women (57.3%) and non-Hispanic black women (57.9%). They conclude that the pill, female sterilization, condoms, and long-acting reversible contraceptives were the most common methods women were currently using.

The results of Nsubuga et al., (2016) also show that over half (55.1 %) of the sexually active women had ever used any method to prevent pregnancy while only 46.6 % were currently using contraceptives with male condoms being the most commonly used method among university students in Uganda.

About 60% of women and 65% of married women in the Ga East District of Ghana reported having ever used modern methods of contraception. Among ever users, 82% thought contraceptives were effective for birth control. However, one-third did not consider modern contraceptive safe. While 76% indicated that they felt comfortable using them (Aryeeetey, Kotoh & Hindin, 2010).

2.9 Modern contraceptive use among adolescents

Assessing modern contraceptive use among adolescents, a trend analysis by Obare et al. (2012) observed that there was low use of contraceptive methods among adolescents who have ever had sex over time. They observed a steady increase in the use of modern methods over time among adolescent girls who had recent sex. They also found a shift from pills to the use of injections and condoms over time although overall levels remain low and that unmet need for contraceptive among married adolescent girls is slightly increasing over time.
Nyongesa & Odunga (2013) also report that the use of modern contraceptives is very low among married adolescents in most countries in Sub-Saharan Africa. In Nigeria, only 1.2% of married adolescent females reported using a modern method of contraception. Their study also revealed injectables as the most commonly used modern method of contraception within the sub-Saharan African region. Hidata, Worku & Urgessa (2015) also report that only 40.2% of sexually active adolescents were using contraceptive methods among in-school adolescents in Ethiopia. The most common modern contraceptives used were condoms, pills and injectables.

Martinez & Abma, 2015 similarly report that majority of female teenagers (18 or 19 years) in the US who had first sexual intercourse used contraceptives compared with those who were 17 and below. In Ghana, 18.3% of adolescents use contraceptives out of which 14.5% use modern contraceptives (Nyarko, 2015). The prevalence of contraceptive use is high among adolescents 18 -19years than among those 15 – 17 years (Nyarko, 2015), in the Talensi district, a survey by Apanga et al., (2015) on uptake of family planning among women in the reproductive age (15-49 years) showed that, 18% had used a family planning service.

2.10 Factors influencing use of modern contraceptives among adolescents

Understanding impediments to regulating fertility is important in the provision of programmes as guidance in relation to the supply of modern contraceptive services (Alaii et al, 2012).

Okech et al., (2011) identified partner’s approval, quality of the services, friendliness of the staff administering the services and the woman’s knowledge about modern contraceptive services as factors accounting for the use of modern contraceptives in Kenya’s city slums. Other factors included the woman’s income level, proximity to the provider and the religious background of the woman.

In Bangladesh, Khan et al (2012) found that factors such as age of respondent, age at first marriage and type of residence influenced contraceptive use. The study also revealed that,
parity by adolescents influenced contraceptive use compared to those who had no living child. According to their study, educational status of respondents’, marital duration, education of husband as well as involvement with NGO program among other factors are important in explaining both ever use and current use of contraception among female adolescents.

Asiimwe et al., 2013 reveal that factors such as education, wealth index, region, residence (urban-rural), and desire for children influence contraceptive use among women in Uganda. Their findings also showed that the likelihood of using contraceptive is associated with educational attainment of women. Thus, the more educated a woman is, the more likely she is to report use of a modern contraceptive.

Discussions of contraceptive use with partner influenced contraceptive use among adolescents. Adolescents who discussed contraceptive use before their first sexual encounter were more likely to use contraceptives consistently when compared to those who had never discussed contraceptive use (Boamah et al., 2014).

Ngome & Odimegwu (2014) used a multi-level analysis and were able to determine that individual and community characteristics were important factors of contraceptive use among adolescents’ in Zimbabwe. Individual characteristics which were influential on adolescent women’s use of modern contraceptives included parity, marital status and access to media. Their results also indicate that adolescent women with at least one child and those that were ever married were more likely to be users of contraceptives. However, they point out that other individual socio-economic variables such as residence, household wealth index and level of autonomy did not have any influence on adolescent contraceptive use as would have been expected. They conclude that adolescent woman’s socio-economic circumstances such as education, wealth, and level of autonomy may not independently be accurate predictors of contraceptive use.
A study by Nyarko (2015) also found that female adolescent contraceptive use was significantly determined by age of adolescent, education, work status, knowledge of ovulatory cycle, visit of health facility and marital status.

Using a multivariate logistic regression analysis, Hidata, Worku & Urgessa (2015) also found that residence, discussion about contraceptive with boyfriend/girlfriend, educational status of mother, illiteracy and knowledge of contraceptive method were significantly associated with adolescent’s contraceptive use.

Kinaro et al., (2015) also argue that partner communication is a factor contributing to contraceptive use among adolescents. They assert that adolescents who communicated with their sexual partner about contraceptives were 8.3 times more likely to use them compared to those who did not do so. They report that other variables include access to contraceptives, opinion of adolescents on contraceptive use and knowledge of how to use a contraceptive method. Their results also indicate that ever married adolescents were less likely to use a modern contraceptive than unmarried adolescents and adolescents who dropped out of school were less likely to use a contraceptive.
CHAPTER THREE

3.0 METHODS

3.1 Introduction

This chapter discusses the methods and techniques that were used to collect and analyze data. The chapter describes the study area, research design, the study population, sample size, sampling method, data collection methods, and quality control, the variables, data processing and analysis as well as ethical concerns.

3.2 Study design

The study design that was adopted for this study was a cross sectional study. Cross sectional study is carried out at one point in time or over a short period of time to estimate the prevalence of the outcome of interest of a given population (Levin, 2006). As this study focused on examining factors influencing the use of modern contraceptives among adolescents, this design was appropriate as it enabled the collection of data on individual characteristics at the time of the study together with information about the dependent variable as well as the association of individual characteristics and the outcome (dependent) variable. This involved the collection of quantitative data from female adolescents aged 15 – 19 years in the Nabdam district of the Upper East Region, Ghana. This was carried out between the months of May – June 2016.

3.3 The study area

The Nabdam District is in the Upper East Region of Ghana with its capital at Nangodi. It shares its boundaries with Bongo District to the North, Talensi District to the South, to the East by the Bawku West District and to the West, the Bolgatanga Municipality (see figure 2).
Figure. 2 A map of the Nabdam District showing study community

The District has a total land area of 244.94km (GSS et al., 2014). Nabdam District has a total population of 33,826, representing 3.2% of the regional population (GSS et al., 2014). The proportion of males in the district is 16,871 constituting 49.9% and females 16,955 also constituting 50.1% (GSS et al., 2014). The sex ratio for the District is 99.5 males per 100 females (GSS et al., 2014). This indicates a slight predominance of the female population. Adolescents form 41.7% thus 14, 105 of the total population (NPHC, 2010). The inhabitants of this district are predominantly farmers, forming 85.9%. They are engaged in the cultivation of
crops, rearing of animals, planting of trees among others. In the total population of those engaged in farming, 49.3% are males and 50.7% are females (GSS et al., 2014).

In relation to health care delivery, the district has a total of 17 health facilities. Out of these, there are 2 health centres (one being a Mission health facility), 2 clinics, and 13 CHPS centres (NDHA, 2016). The services provided in these facilities include outpatient department (OPD) services, antenatal care (ANC) services, postnatal care (PNC) services, laboratory services, nutrition services, family planning services, ultra-scan services among others. The top most causes of OPD attendants include malaria, diarrhea, acute respiratory tract infection (ARTI), skin infections, road accidents, eye infection, enteric fever and uterine tract infection (NDHA, 2016)

3.4 Study Population

The study focused on adolescent girls aged 15 -19 years. The focused on this age because it is the age most adolescents become sexually active and as well experience challenges such as adolescent pregnancy and its consequences.

3.4.1 Inclusion Criteria

1. Adolescent girls who had celebrated their 15th birthday but had not yet celebrated their 20th birth day were included in the study.
2. Adolescents girls who were sexually active at the time of the study
3. Adolescents in school and those out of school,
4. Those married and unmarried were included in the study.
3.4.2 **Exclusion Criteria**

1. An adolescent who was not within the selected sub district under the study
2. An adolescent who was not mentally sound was not considered
3. An adolescent who was not willing to take part was not included
4. A male adolescent
3.5 Sample Size Determination

The estimated adolescent population of the district is 14,105 (i.e. 41.7% of the total population of 33,826). Considering the large adolescent population size, a sample was drawn from the population to make an inference about the adolescent population. To determine an appropriate sample size for the study, Cochran (1977) formula was used and the formula is denoted by:

\[ n = \frac{z^2pq}{d^2} \]

Where; \( n \) = sample size required

\( z \) = the value for the given confidence interval

\( d \) = margin of error

\( p \) = population proportion (prevalence of the outcome of interest)

\( q \) = 1 – \( p \)

In determining this, 95% confidence interval and 5% margin of error were used. The prevalence of contraceptive use among adolescents aged 15 – 19 years in Ghana is 19% (GSS et al., 2015). Hence, the sample size was determined as;

\[ n = ?? \]

\( z = 1.96 \)

\( d = 0.05 \) (5%)

\( p = 0.19 \) (19%)

\( q = 1 - p, (1 - 0.19 = 0.81) \)

\[ n = 1.96^2(0.19) * (0.81) / 0.05^2 \]
n = 236.5

n = 237

To account for non-response, a 10% upward adjustment was made. Therefore, 10% of 236.5; 237*(0.10) = 24, the final total sample size therefore was 237 + 24 = 261 adolescents.

3.6 Sampling Methods and Procedure

There were five (5) sub districts within the Nabdam District Health Administration (DHA). But for the sake of time, resources and the purpose of this study, only one sub district was considered in this study. A multi-stage sampling technique was used in selecting the study participants. First, simple random sampling technique was used to select a sub district from the total of five. This was done by giving each sub district a number, (i.e. 1 – 5). These numbers were then written on pieces of papers, foldered and kept in a bowl. At random, one piece of paper was selected and the sub - district corresponding to the selected number was the sub - district within which the study was carried out, thus, Kongo – Pitanga sub district.

Second, a simple random sampling technique was employed to select the number of houses to be included in this study. There was data already specifying the number of houses and houses numbered within the sub district. Based on this information an electronic or computer-based number generator was used to randomly select 261 houses for the study.,

The third stage involved selection of participants in houses with only one household with only one adolescent who met the inclusion criteria, that household was considered. However, where there was more than one adolescent in the selected household, a simple random sampling technique was used to select only one adolescent. This was done by giving each adolescent a number (e.g. 1 – 3). These numbers were then written on pieces of papers, foldered and kept in a bowl. At random, one piece of paper was selected and the adolescent corresponding to the
selected number was included in the study. Also, where there were more than one household with adolescents who met the inclusion criteria, a simple random sampling technique (similar to the one described above) was used. Finally, where no adolescent in the selected house met the inclusion criteria, the house was replaced with the next house.

3.7 Data Collection Methods

The data was collected with the help of five research assistants. The research assistants were university graduates living in the District. The research assistants were trained to assist in data collection. The training focused on the objectives of the study, how to obtain consent from study participants or their parents/guardians (thus, for those who were below 18 years). They were also taken through community entry, building rapport, assurance of privacy and confidentiality, meaning and interpretation of items of measure, correct ticking of responses that were provided.

3.8 Data collection Tools

The data collection tool that was used in this study was a structured survey questionnaire. The questionnaire was developed and used to collect data from the adolescents. The questionnaire contained both closed and open-ended questions with spaces for explanation where it was required. The questions and structuring of the questionnaire was informed by findings from reviewed literature.

The questionnaire was designed in English but was administered in both English and the local dialect (Nabit). This enabled adolescents who did not speak English to understand and appropriately and comfortably respond to the questionnaire.
3.8.1 Pretest of the Study Instrument

The questionnaire was pretested in the Talensi district prior to actual data collection. The adolescents in this district had similar characteristics as the adolescents in the study area. This helped make necessary corrections before the actual data collection.

3.9 Quality Control

The process of data collection was standardized to obtain uniform and quality data.

- The research assistants were trained to understand the objectives of the study and the variables the study sought to measure.
- The questionnaires were checked for completeness before data entry.
- Questionnaires were numbered before entry to avoid duplication of entry. This was done by entering data into two separate computers with the same software to help check correct data entry.

3.10 Variables

Two main variables were considered, independent and dependent or outcome variables.

3.10.1 Dependent variable

The outcome variable in the study was modern contraceptive use. Modern contraceptive use referred to the use of any of the following methods, female condoms, pills, injectables, implants, female sterilization, lactational amenorrhea method (LAM) and intra uterine device (IUD).

3.10.2 Independent variable

The independent variables were grouped into
- Individual factors, this included age, educational level, religious affiliation, marital status
- Health service factors such as attitude of service providers, available service points (adolescent health corners), available varied modern contraceptives and
- Societal factors such as, parent and or peer influence, religious beliefs and practices, partners consent and public perception of adolescent users of contraceptive.

3.11 Data Management and Analysis

Administered questionnaires were cleaned, coded and entered using Epi info version 3.5.1. The data was exported to STATA Version 14. Descriptive statistical analysis (mean, median and standard deviation) were performed to first describe the characteristics of study participants and other variables. Bivariate and logistic regression analyses were used to examine possible associations between outcome variables and independent variables. Odds ratio (OR) and their 95% confidence interval were also estimated to determine strength of possible association between the outcome variable and relevant independent variables. Statistical significance was held at p < 0.05.

3.12 Ethical Considerations

**Ethical Clearance:**

1. Ethical clearance was obtained from the Ghana Health Service Ethical Review Committee with the protocol approval number GHS – ERC: 88/02/17.
2. In addition, written permission was obtained from appropriate bodies (the Regional Health Directorate and District Health Administration) of concern within the study area.
**Informed Consent:**

3. Informed written consent was sought from all participants. Informed consent was sought at different levels of the study. Informed consent for adolescents below 18 years was sought from their parents/ guardians either by signing or thumb printing a consent form. These adolescents then accented to their parents’ consent by either thumb printing or signing an assent form. Other respondents 18 years and above however consented by themselves by either thumb printing or signing an individual consent form.

**Voluntary nature of participation:**

4. Participants were made to understand that participating in the research was entirely voluntary and they were at liberty not to continue to be participants of the research when they make the decision with no penalty. Moreover, participants were made aware that if they decided to participate in the study, they were at liberty not to answer questions if they did not feel comfortable.

**Confidentiality:**

5. Participants were assured of strict anonymity and confidentiality on any information they gave during the research. Only the research team had access to the answered questionnaires. Confidentiality and privacy were maintained by keeping all materials under lock and key. Participants’ names were not recorded. Instead, all data files were coded and stored in randomly selected identification numbers, making it impossible to identify any respondent.
**Risks and benefits:**

6. There were minimum or no risks for taking part in this study. There was no incentives or direct benefits to individual participants. However, participants were made to understand that the information they provided might indirectly benefit them (especially those below 18 years), if findings of the research are adopted and through policy formulation and/or restructuring of adolescents sexual and reproductive health services at the national level, challenges related to adolescent sexual reproductive health needs are addressed through health services delivery and in schools through the school health programmes and the educational syllabus. This may create avenues (e.g. adolescent corners) for them (adolescents) to freely and confidentially address their sexual and reproductive health challenges or needs.

**Compensation:**

7. There was no monetary compensation or incentive for this study. Participation was voluntary.

**3.12 Chapter Summary**

This chapter discussed the methods that was used in the study, and it was centred on the study design, study population, sampling and data analysis. The result of the study is presented on the next chapter.
CHAPTER FOUR
4.0 RESULTS

4.1 Introduction

The results of the study are presented in this chapter. This focuses on the socio-demographic characteristics of the respondents, sexual behaviour, awareness and knowledge and use of modern contraceptives. The chapter also looks at the socio-demographic factors together with other factors that influence adolescents contraceptive use.

4.2 Socio-demographic characteristics of respondents

Table 4.1 shows the socio-demographic characteristics of respondents. The study involved 261 respondents aged 15 – 19 years with 100% response rate. The mean age of respondents was 16.7 years (SD ±1.4), with minimum age of 15 years and maximum of 19 years. Majority of the respondents were within age 17 – 19 years (51.3%). Some 93.5% of the respondents had some form of education, of which 63.6% have been to J.H.S while 10.3% have been to S.H.S. Only 6.3% of the respondents had no education.

In terms of religious background, 92% were Christians, 8% traditionalist whiles Muslims were 4.6%. Majority (73.2%) of respondents stayed with their parents while 17.6% stayed with their partners. In relation to the education of fathers and mothers of the respondents, 78.5% and 75.5% of respondents reported that their fathers and mothers respectively, had no education. On the issue of the occupation of parents of respondents, 99.6% and 99.2% of fathers and mothers, respectively, have informal jobs.
Table 4.1 Socio – demographic Characteristics of respondents

<table>
<thead>
<tr>
<th>Characteristics</th>
<th>Frequency</th>
<th>Percentage</th>
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<tr>
<td>Age</td>
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</tr>
<tr>
<td>15 – 19</td>
<td>261</td>
<td>100.0</td>
</tr>
<tr>
<td>Level of education</td>
<td></td>
<td></td>
</tr>
<tr>
<td>No education</td>
<td>17</td>
<td>6.5</td>
</tr>
<tr>
<td>Primary</td>
<td>51</td>
<td>19.5</td>
</tr>
<tr>
<td>J.H.S</td>
<td>166</td>
<td>63.6</td>
</tr>
<tr>
<td>S.H.S</td>
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<td>10.3</td>
</tr>
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<td>50.6</td>
</tr>
<tr>
<td>Charismatic</td>
<td>76</td>
<td>29.1</td>
</tr>
<tr>
<td>Islam</td>
<td>12</td>
<td>4.6</td>
</tr>
<tr>
<td>Traditional</td>
<td>21</td>
<td>8.0</td>
</tr>
<tr>
<td>Other</td>
<td>20</td>
<td>7.7</td>
</tr>
<tr>
<td>Marital status</td>
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<td></td>
</tr>
<tr>
<td>Married</td>
<td>45</td>
<td>17.2</td>
</tr>
<tr>
<td>Not married</td>
<td>216</td>
<td>82.8</td>
</tr>
<tr>
<td>Stay with</td>
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<td></td>
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<tr>
<td>Parents</td>
<td>191</td>
<td>73.2</td>
</tr>
<tr>
<td>Partner</td>
<td>46</td>
<td>17.6</td>
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<tr>
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<tr>
<td>Father education</td>
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<td>Primary</td>
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<td>1.9</td>
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<td>Tertiary</td>
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<td>1.5</td>
</tr>
<tr>
<td>Mother education</td>
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<td></td>
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<tr>
<td>No education</td>
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<td>75.5</td>
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<tr>
<td>Primary</td>
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<td>J.H.S</td>
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<td>8.0</td>
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<tr>
<td>S.H.S</td>
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<td>2.7</td>
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<tr>
<td>Tertiary</td>
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<td>0.8</td>
</tr>
<tr>
<td>Occupation of father</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Formal</td>
<td>4</td>
<td>1.5</td>
</tr>
<tr>
<td>Informal</td>
<td>257</td>
<td>98.5</td>
</tr>
<tr>
<td>Occupation of mother</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Formal</td>
<td>4</td>
<td>1.5</td>
</tr>
<tr>
<td>Informal</td>
<td>257</td>
<td>98.5</td>
</tr>
</tbody>
</table>

Mean Age(years): 16.7 ±1.4, Min: 15 & Max: 19
4.3 Sexual behaviour among adolescents

The study first assessed the sexual behaviour of respondents followed by awareness and knowledge of contraceptive. This result is displayed in Table 4.2. The results indicate that mean age at first sex was 15.8 years (SD ±1.4) with the minimum and maximum ages of 10 and 19 years respectively. Nearly half (49.8%) of respondents currently have a sexual partner while 50.2% do not have. Of the 49.8% who currently have a sexual partner, 87.5% reported that they have had 1 (one) sexual partner while 8.1% have had between 2 – 3 sexual partners.

In relation to having sexual intercourse while drunk, 94.3% respondents who have had sexual intercourse indicated that they never engaged in sex while drunk, while 5.7% reported that they have had sex while drunk. Some 73.9% of the respondents indicated that they were not pressurized to have sexual intercourse while 26.1% reported to have been pressurized into having sex. Among the 26.1% respondents who reported experiencing some pressure, 89.7% said the pressure came from their partners while 1.5% were pressurized by peers.
Table 4.2: Sexual behaviour among adolescents

<table>
<thead>
<tr>
<th>Characteristics</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Ever had sex</strong></td>
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<td></td>
</tr>
<tr>
<td>Yes</td>
<td>136</td>
<td>52.1</td>
</tr>
<tr>
<td>No</td>
<td>125</td>
<td>47.9</td>
</tr>
<tr>
<td><strong>Age at first sex</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8 – 10</td>
<td>2</td>
<td>1.5</td>
</tr>
<tr>
<td>11 – 13</td>
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<tr>
<td>14 – 16</td>
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<td>17 – 19</td>
<td>37</td>
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<td><strong>Condom or any contraceptive use at first sex</strong></td>
<td></td>
<td></td>
</tr>
<tr>
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<td>41</td>
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<td>0.8</td>
</tr>
<tr>
<td><strong>Had sex while drunk</strong></td>
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<td></td>
</tr>
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<td>15</td>
<td>5.7</td>
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</tr>
<tr>
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<td></td>
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<tr>
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<td>66.7</td>
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<tr>
<td><strong>Feel pressurized to have unprotected sex</strong></td>
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<td></td>
</tr>
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<td>68</td>
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<tr>
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<td>73.9</td>
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<td><strong>Person from whom pressure comes from</strong></td>
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<tr>
<td><strong>Sex education can influence modern contraceptive use</strong></td>
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<td></td>
</tr>
<tr>
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<td>214</td>
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<td><strong>Had sex education from home</strong></td>
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<td><strong>Had sex education from school</strong></td>
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<td>65</td>
<td>24.9</td>
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</table>

Mean Age at first sex(years): 15.8 ±1.4, Min:10 & Max:19; Mean no. of sexual partners: 0.5 ±0.6, min: 0 & max: 3.
4.4. Awareness and knowledge of modern contraceptives

Table 4.3 presents respondents awareness and knowledge of modern contraceptives. Majority (87.6%) of respondents had heard about modern contraceptives while 12.4% indicated they have never heard of any modern contraceptive method. Of the 261 respondents interviewed, 42.1% indicated that modern contraceptive use provides 100% protection from pregnancy while 25.3% did not know (see Figure 1). Of the 87.6% majority who had heard about modern contraceptives, 65.8% and 65.1% had heard about injectables and pills respectively while 34% had heard about other methods (vagina loop). Majority (96.8%) of respondents knew where to get any of these methods while 3.2% indicated they did not know where to get these modern contraceptives. In terms of the specific place where one could get modern contraceptives, 90.1% indicated the clinic, 36.8% reported the drug store while 0.7% indicated family members.

In relation to decision on contraceptive use, majority (69.7%) of respondents indicated it was not the decision of the woman while 30.3% indicated that the decision rested on the woman. Also 52.5% of respondents agreed that women who use contraceptives are promiscuous while 47.5% disagreed.
<table>
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<th>Characteristics of respondents</th>
<th>Frequency</th>
<th>Percentage</th>
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<td><strong>How you heard about this</strong></td>
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<td>15.6</td>
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<tr>
<td>Peers</td>
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<td>13.9</td>
</tr>
<tr>
<td>Partner</td>
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<td>10.0</td>
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<td>Print media</td>
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<td>Others</td>
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<td>1.1</td>
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<tr>
<td><strong>Ever heard of modern contraceptive methods</strong></td>
<td></td>
<td></td>
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<td>82.8</td>
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<tr>
<td>No</td>
<td>31</td>
<td>17.2</td>
</tr>
<tr>
<td><strong>Methods you have heard about</strong></td>
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<td></td>
</tr>
<tr>
<td>Injectable</td>
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<td>65.8</td>
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<tr>
<td>Pills</td>
<td>97</td>
<td>65.1</td>
</tr>
<tr>
<td>Female condom</td>
<td>91</td>
<td>61.1</td>
</tr>
<tr>
<td>IUD</td>
<td>16</td>
<td>10.7</td>
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<tr>
<td>LAM</td>
<td>6</td>
<td>4.0</td>
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<tr>
<td>Others (vaginal loop)</td>
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<td>3.4</td>
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<tr>
<td><strong>Knows a place to get contraceptive</strong></td>
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<td></td>
</tr>
<tr>
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<tr>
<td>No</td>
<td>5</td>
<td>3.2</td>
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<tr>
<td><strong>Specific place to get these contraceptives</strong></td>
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<td></td>
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<td>Clinic</td>
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<td>90.1</td>
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<td>Drug store</td>
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<td>36.8</td>
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<tr>
<td>Family planning clinic</td>
<td>44</td>
<td>28.9</td>
</tr>
<tr>
<td>Health worker</td>
<td>42</td>
<td>27.6</td>
</tr>
<tr>
<td>Peers</td>
<td>6</td>
<td>3.9</td>
</tr>
<tr>
<td>Family members</td>
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<td>0.7</td>
</tr>
<tr>
<td><strong>Use of contraceptive is the decision of the woman</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>79</td>
<td>30.3</td>
</tr>
<tr>
<td>No</td>
<td>182</td>
<td>69.7</td>
</tr>
<tr>
<td><strong>Women who use modern contraceptives are promiscuous</strong></td>
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<td></td>
</tr>
<tr>
<td>Yes</td>
<td>137</td>
<td>52.5</td>
</tr>
<tr>
<td>No</td>
<td>124</td>
<td>47.5</td>
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</table>
4.5 Modern Contraceptive Use Among Adolescents

One objective of this research was to determine the prevalence of modern contraceptive use among adolescents. Table 4.4 shows the modern contraceptive prevalence among the adolescents surveyed. When respondents were asked whether they have ever used any modern contraceptive method, 72.9% indicated they had never used any modern contraceptive whereas 27.1% reported to have ever used a modern contraceptive method. The modern contraceptive methods respondents had used before included pills, injectables, female condom, IUD and implants. The contraceptive method that was reported to be used by the majority (46.4%) of respondents was pills, followed by injectables (31.9%), with the least used method being implants (1.4%).

In terms of current contraceptive use, majority (78.0%) of the respondents reported not using any contraceptive method while 22.0% were currently using a modern contraceptive method. Out of this 57 (22%) current modern contraceptive users, 39.6% of respondents each were
using pills and injectables while the method least used was LAM (1.9%). Considering whether respondents were using short or long-term contraceptive methods, 45.6% used short term methods whiles 54.4% used long term methods (see figure 3). Out of these proportions, 38.5% of respondents aged 14 – 16 years and 61.5% of respondents (17 – 19 years) used short term contraceptive methods whiles 16.1% of respondents (14 – 16 years) and 83.9% of respondents (17 -19 years) used long term contraceptives. In terms of where the respondents thought they could access these contraceptives, 73.6% indicated the clinic while 33.0% reported health workers and 2.7% indicated they could access contraceptives from their peers.

Finally, in relation to why they would use a modern contraceptive, some of the responses reported included: to avoid pregnancy (48.7%), delay childbirth (37.9%), prevent STIs (12.3%), and others (space birth) (1.1%).
Table 4.4 Modern contraceptive use among adolescents

<table>
<thead>
<tr>
<th>Characteristics of respondents</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Ever used any modern contraceptive</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>69</td>
<td>27.1</td>
</tr>
<tr>
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<td>186</td>
<td>72.9</td>
</tr>
<tr>
<td><strong>Methods used before</strong></td>
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<td></td>
</tr>
<tr>
<td>Pills</td>
<td>32</td>
<td>46.4</td>
</tr>
<tr>
<td>Injectables</td>
<td>22</td>
<td>31.9</td>
</tr>
<tr>
<td>Female condom</td>
<td>11</td>
<td>15.9</td>
</tr>
<tr>
<td>IUD</td>
<td>4</td>
<td>5.8</td>
</tr>
<tr>
<td>Implants</td>
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<td>1.4</td>
</tr>
<tr>
<td><strong>Currently using a modern contraceptive method</strong></td>
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<td></td>
</tr>
<tr>
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<td>57</td>
<td>22.0</td>
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<tr>
<td>No</td>
<td>202</td>
<td>78.0</td>
</tr>
<tr>
<td><strong>Methods currently used</strong></td>
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<td></td>
</tr>
<tr>
<td>Injectable</td>
<td>21</td>
<td>39.6</td>
</tr>
<tr>
<td>Pills</td>
<td>21</td>
<td>39.6</td>
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<tr>
<td>Female condom</td>
<td>5</td>
<td>9.4</td>
</tr>
<tr>
<td>IUD</td>
<td>4</td>
<td>7.5</td>
</tr>
<tr>
<td>Implants</td>
<td>3</td>
<td>5.7</td>
</tr>
<tr>
<td>Other</td>
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<td>3.8</td>
</tr>
<tr>
<td>LAM</td>
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<td>1.9</td>
</tr>
<tr>
<td><strong>Place to get contraceptives in community</strong></td>
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<td></td>
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<tr>
<td>Clinic</td>
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<td>Health worker</td>
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<td>31.8</td>
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<td>19.2</td>
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<tr>
<td>Partner</td>
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<td>3.1</td>
</tr>
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<td>Peers</td>
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<td>2.7</td>
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<tr>
<td><strong>Reason for modern contraceptive use</strong></td>
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<tr>
<td>Avoid pregnancy</td>
<td>127</td>
<td>48.7</td>
</tr>
<tr>
<td>Delay childbirth</td>
<td>99</td>
<td>37.9</td>
</tr>
<tr>
<td>Prevent STIs</td>
<td>32</td>
<td>12.3</td>
</tr>
<tr>
<td>Others (space birth)</td>
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<td>1.1</td>
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</table>
4.6 Factors influencing adolescents use of modern contraceptives.

To this end a bivariate analysis was carried out to examine the association between the factors and the use of modern contraceptives. The result is displayed in Table 4.5. Age of respondents was significantly associated with modern contraceptive use (p< 0.001). Thus, 30.8% of respondents between age 17 – 19 years used modern contraceptives compared with 9.5% of modern contraceptive use among those aged 14 -16 years. Educational level of respondents was also significantly associated with modern contraceptive use (p< 0.001). For instance, 25.9% of adolescents in SHS used modern contraceptives compared to 14.5% of adolescents in JHS who used modern contraceptives. Thus, increase in educational attainment is related to modern contraceptive use. Marital status was significantly associated with modern contraceptive use (p<0.001). Whereas 43.9% adolescents who used modern contraceptives were married, only 14.5% adolescents who used modern contraceptive were not married. Peer influence also had a significant association with modern contraceptive usage (p<0.001). Some 84.6% of adolescent used modern contraceptives due to peer influence compared to 59.5% who did so without peer influence. Furthermore, who a respondent stayed with had a significant
association with modern contraceptive use (p<0.001). For instance, only 14.8% of respondents who used modern contraceptives stayed with their parents compared to 47.8% who stayed with their partners. Religious affiliation was significantly associated with modern contraceptive use (p<0.018). Thus, 33.3% of traditional believers, 19.9% of Christians and 8.3% of muslims (islam) use modern contraceptives. The status of respondents who had or did not have a sexual partner was significantly associated to modern contraceptive use (p<0.001). Some 39.8% of respondents who used modern contraceptives had sexual partners compared to only 0.8% respondents who used modern contraceptives who had no sex partners. Partner consent was similarly associated with modern contraceptive use (p<0.001). Nearly 32% of respondents who used modern contraceptives required their partners consent compared with 9.7% indicated they did not require the consent of their partners. Positive attitude of health workers was also significantly associated with modern contraceptive usage (p<0.001). Thus, 24.4% used modern contraceptives and these were respondents who indicated the attitude of health workers affected whether they would use any modern contraceptive compared to 9.7% users who reported that the attitude of healthcare workers did not define their use of modern contraceptives. Contraceptive availability was significantly associated (p<0.001) with modern contraceptive of use, with 23.7% users of modern contraceptives reporting availability of modern contraceptive to influence its usage compared to 2.4% who had used modern contraceptive but did not see contraceptive availability to be related to its use.

However, factors such as knowledge of contraceptives and health service points had no significant association with contraceptive use.
Table 4.5 Socio-demographic factors and other factors influencing modern contraceptive use by adolescents’.

<table>
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<tr>
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<th>Contraceptive use, n (%)</th>
<th>p-value chi-square</th>
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<tr>
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<tr>
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<td>141 (85.5)</td>
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<th>Have a sexual partner</th>
<th>No</th>
<th>Yes</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>127 (99.2)</td>
<td>1 (0.8)</td>
<td>0.000*</td>
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<td>Yes</td>
<td>79 (60.3)</td>
<td>52 (39.7)</td>
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</table>

<table>
<thead>
<tr>
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<th>No</th>
<th>Yes</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>121 (90.3)</td>
<td>13 (9.7)</td>
<td>0.000*</td>
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<tr>
<td>Yes</td>
<td>85 (68.5)</td>
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<table>
<thead>
<tr>
<th>Have experienced negativity in terms of contraceptive use from society</th>
<th>No</th>
<th>Yes</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>56 (90.3)</td>
<td>6 (9.7)</td>
<td>0.018*</td>
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<tr>
<td>Yes</td>
<td>150 (76.5)</td>
<td>46 (23.5)</td>
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<table>
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<tr>
<th>Positive attitude of Health workers</th>
<th>No</th>
<th>Yes</th>
<th>p-value</th>
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</tr>
<tr>
<td>Yes</td>
<td>155 (75.6)</td>
<td>50 (24.4)</td>
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</table>

<table>
<thead>
<tr>
<th>Availability of Contraceptive</th>
<th>No</th>
<th>Yes</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>40 (97.6)</td>
<td>1 (2.4)</td>
<td>0.001*</td>
</tr>
<tr>
<td>Yes</td>
<td>164 (76.3)</td>
<td>51 (23.7)</td>
<td></td>
</tr>
</tbody>
</table>

4.7 Logistic regression of factors that influence modern contraceptive use by adolescents.

The odds of using modern contraceptive was 83.59 times higher among adolescents with sexual partners compared with those who had no sexual partners (OR=3.48, 95% CI=1.51 – 9.27) with p<0.001. When other variables were adjusted for, having a sexual partner was still significantly associated with modern contraceptive use (OR=72.56, 95% CI=9.62 – 616.79) with p<0.001. Adolescents who had peers influencing them were 3.74 times more likely to use modern contraceptives compared to those who indicated peer influence did not affect their use of modern contraceptives (OR=3.74, 95%CI=1.67 – 8.35) with p<0.001. However, when other variables were adjusted for, peer influence was not statistically significant (OR=0.09,
95%CI=0.01 – 0.86) with p<0.37. Adolescents who reported partner consent as an indicator for modern contraceptive use were 4.3 times more likely to use modern contraceptives compared to adolescents who did not consider partners consent as a factor to modern contraceptive. (OR=4.27, 95%CI=2.15 – 8.48) with p<0.001. When other variables were controlled for, partner consent was still significantly associated with modern contraceptive use (OR=3.48, 95%CI=1.51 – 7.98 with p<0.003.

Finally, adolescents who indicated to have experienced negativity as result of contraceptive use from society influenced contraceptive use, had odds of 2.9 times high of contraceptive use compared to respondents who did not recognise that negative perception of society has an impact on modern contraceptive use (OR=2.86, 95%CI=1.15 – 7.07) p<0.018. The odds increased when negative perception of society was adjusted (OR=3.27, 95%CI=1.15 – 9.27) with p<0.025.
Table 4.6 Logistic regression of factors influencing modern contraceptive use

<table>
<thead>
<tr>
<th>Variables</th>
<th>Crude OR (95% CI)</th>
<th>p-value</th>
<th>Adjusted OR (95%)</th>
<th>p-value</th>
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</thead>
<tbody>
<tr>
<td><strong>Age group</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>14 – 16</td>
<td>1</td>
<td></td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>17 – 19</td>
<td>4.23 (2.10–8.52)</td>
<td>&lt;10⁻³</td>
<td>2.65 (1.12–6.28)</td>
<td>0.026</td>
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<tr>
<td><strong>Marital status</strong></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Not married</td>
<td>1</td>
<td></td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Married</td>
<td>5.64 (2.81 – 11.34)</td>
<td>&lt;10⁻³</td>
<td>1.85 (0.75 – 4.52)</td>
<td>0.178</td>
</tr>
<tr>
<td><strong>Educational level</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No education</td>
<td>1</td>
<td></td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Primary</td>
<td>0.22 (0.06 – 0.71)</td>
<td>0.011</td>
<td>0.48 (0.10 – 2.26)</td>
<td>0.355</td>
</tr>
<tr>
<td>J.H. S</td>
<td>0.12 (0.04 – 0.34)</td>
<td>&lt;10⁻³</td>
<td>0.37 (0.08 – 1.78)</td>
<td>0.216</td>
</tr>
<tr>
<td>S.H. S</td>
<td>0.245 (0.06 – 0.89)</td>
<td>0.033</td>
<td>2.10 (0.30 – 14.53)</td>
<td>0.451</td>
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<tr>
<td><strong>Religious affiliation</strong></td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No silence</td>
<td>1</td>
<td></td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>0.349 (0.14 – 0.86)</td>
<td>0.018*</td>
<td>0.38 (0.13 – 1.11)</td>
<td>0.078</td>
</tr>
<tr>
<td><strong>Sex partner</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No</td>
<td>1</td>
<td></td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>83.59 (11.32 – 616.79)</td>
<td>0.423</td>
<td>72.56 (9.62 – 547)</td>
<td>0.000*</td>
</tr>
<tr>
<td><strong>Peer influence</strong></td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No</td>
<td>1</td>
<td></td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>3.74 (1.67 – 8.35)</td>
<td>0.001*</td>
<td>0.09(0.01 – 0.86)</td>
<td>0.037*</td>
</tr>
<tr>
<td><strong>Partner consent</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No</td>
<td>1</td>
<td></td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>4.27 (2.15 – 8.48)</td>
<td>&lt;10⁻³</td>
<td>3.48 (1.51 – 7.98)</td>
<td>0.003*</td>
</tr>
<tr>
<td><strong>Have experienced negativity in terms of contraceptive use from society</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No</td>
<td>1</td>
<td></td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>2.86 (1.15 – 7.07)</td>
<td>0.018*</td>
<td>3.27 (1.15 – 9.27)</td>
<td>0.025*</td>
</tr>
<tr>
<td><strong>Positive attitude of Health workers</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No</td>
<td>1</td>
<td></td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>8.06 (1.89 – 34.34)</td>
<td>&lt;10⁻³</td>
<td>0.85 (0.13 – 5.43)</td>
<td>0.866</td>
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<tr>
<td><strong>Availability of Contraceptive</strong></td>
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<td></td>
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<tr>
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<td>1</td>
<td></td>
<td>1</td>
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</tr>
<tr>
<td>Yes</td>
<td>12.43 (1.66 – 92.7)</td>
<td>0.001*</td>
<td>1.77 (0.17–17.63)</td>
<td>0.625</td>
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<tr>
<td><strong>Stay with</strong></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Parents</td>
<td>1</td>
<td></td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Guardian</td>
<td>0.82(0.23 – 2.93)</td>
<td>0.762</td>
<td>1.70 (0.32 – 9.06)</td>
<td>0.533</td>
</tr>
<tr>
<td>Partner</td>
<td>5.27 (2.6 – 10.65)</td>
<td>&lt;10⁻³</td>
<td>1.02 (0.19 – 5.44)</td>
<td>0.982</td>
</tr>
</tbody>
</table>

* Adjusted for sexual partner, Partner consent, Perception of society, Age, Peer influence

** Adjusted for sexual partner, marital status, Partner consent, positive attitude of health workers, Perception of society, Availability of contraceptive, Age, Peer influence.
Adjusted for sexual partner, marital status, religion beliefs and practices, Partner consent, positive attitude of health workers, Perception of society, Availability of contraceptive, Age, level of education, stay with. OR=Odd ratio, C.I: confidence interval, REF: Reference, *p<0.05

### 4.8 Chapter Summary

This chapter presented the results of the study. The results suggest that some individual, societal and health service factors were significantly associated with modern contraceptive use.

In the next, these results are discussed in detail.
CHAPTER FIVE

5.0 DISCUSSION

5.1 Introduction

This chapter discusses the findings from the previous chapter. The discussion is structured into a summary of the key findings, comparison of the findings with existing studies carried out elsewhere, and explanation of the findings. It also spells out the strengths and limitations of the study.

5.2 Summary of Findings

The purpose of this study was to examine the factors influencing adolescents’ usage of modern contraceptives in the Nabdam district of the Upper East Region. The findings of this study revealed that though awareness about modern contraceptives was high (87.6%), contraceptive use was low (22.0%). Among adolescents who had heard about modern contraceptives, the modern contraceptive methods that were largely known were injectables (65.8%) and pills (65.1%). The commonly used methods were pills (46.4%) and injectables (31.9%). The findings of the study showed that 52.1% of the respondents had had sex before. Among adolescents who had had sex before, the age at first sex ranged from 10 – 19 years. Also, 72.9% of the respondents who were sexually active have never used any modern contraceptive method while 27.1% had ever used a modern contraceptive method. The use of modern contraceptives was significantly associated with many factors including age, educational status, partner support/consent, peer influence and religious beliefs and practices.

However, factors such as knowledge of modern contraceptives and health service point had no significant association with the use of modern contraceptives in this study.
5.3 Consistency of findings with previous studies.

Many of the findings from this study are consistent with findings from previous studies. Previous research has shown that many adolescents have had sex before their 20th birthday and one of such can be found in a study by Ramjee and Daniels (2013), which suggest that 75% of adolescents in Sub – Sahara Africa have had sex by age twenty. Similarly, findings of this study demonstrate that 52.1% of respondents had had sex before age 20 and the minimum age at first sex was 10 years whiles the maximum age at first sex was 19 years.

The study revealed that 87.6% of respondents had heard of modern contraceptives and 42.1% of respondents indicated contraceptive use provided 100% protection from pregnancy. This finding aligns well with the GDHS (2014), which states that, knowledge of contraceptive is universal in Ghana and that 96.5% of married adolescents aged 15 – 19 years have some form of knowledge about a method of modern contraceptive. Another study by Sweya et al (2016) also showed that, contraceptive knowledge among female adolescents’ undergraduates in Kilimanjaro – Kenya was high with 78% familiar with male condoms while 60.4% reported to have heard about the pill.

Irrespective of the elevated level of knowledge of modern contraceptive among adolescents in this study, 78.0 % of respondents have never used a contraceptive method. This is consistent with a study by Nyongesa and Odunga (2015) who argue that there is abundant information that contraceptive knowledge and awareness is high among young people in Sub-Saharan Africa population but that this awareness has not translated into increased contraceptive use, with the result being very low contraceptive prevalence.

Age of respondents was significantly associated with modern contraceptive use. A remarkably high percentage of respondents (90.5%) aged 14 – 16 years did not use contraceptives, thus only 9.5% of respondents (14 – 16 years) used modern contraceptive compared to 69.5% of
respondents aged 17 – 19 years who did not use any contraceptive while 30.5% (respondents 17 – 19yrs) used a modern contraceptive. Adolescents aged 17 – 19 years had higher odds of using modern contraceptives compared to those aged 14 – 16 years (OR=4.23, 95%CI=2.10 – 8.52). This is also consistent with Koyango’s (2013) study, which found that age was associated with modern contraceptive use. Also, in other studies carried out by Khan et al., (2012) and Nyarko (2015), it was reported that, age of respondents was significantly associated with modern contraceptive use by adolescents.

The present study also revealed that 45.6% of respondents used short term methods whiles 54.4% used long term methods. Out of these proportions, 38.5% of respondents aged 14 – 16 years and 61.5% of respondents (aged, 17 – 19 years) used short term contraceptive methods whiles 16.1% of respondents (14 – 16 years) and 83.9% of respondents (17 -19 years) used long term contraceptives respectively. It is obvious from this that majority (83.9%) of adolescents aged 17 – 19 years used long term contraceptive methods compared to respondents aged 14 – 16 years. This is consistence with the findings by Mekonnen et al., (2014) which stated that age of women significantly influences the use of long term modern contraceptive.

Educational status of respondents was significantly associated to adolescent’s usage of modern contraceptives. This is also in consonance with the findings of Asiimwe et al., (2013) in Uganda where they found that educational level of respondent was significantly associated with the use of modern contraceptive among women, Nyarko (2015) also reported that educational level of adolescents is significantly associated to modern contraceptive use. In this study, partner consent was found to be significantly associated with modern contraceptive use among adolescents’. This is also in agreement with other studies such as the study by Boamah et al., (2014) and Obare et al., (2011). The studies have reported that, adolescents use of modern contraceptives was significantly associated with discussions with their partner and that the approval of the partner was associated with contraceptive use. Marital status of respondents
was another measure that was significantly associated with the use of modern contraceptives by adolescents. This is related to studies done by Ngome and Odimegwu (2014), which indicated that characteristics such as marital status influenced the use of modern contraceptives by adolescents. Findings from the study also showed that, adolescents with sex partners were more likely to use modern contraceptives compared to those who had no sex partners. This finding is similar to the study by Obare et al., (2011), who observed that adolescents who had recent sex (sexual partners) were more likely to use modern contraceptives compared to those who had no sex partners (had not had sex in recent time). The current study equally reported that the religious affiliation of respondents and positive attitude of health workers influenced adolescents use of modern contraceptives and this can also be found in a study by Okech et al., (2011), who identified religious affiliation and the friendliness (positive attitude) of service providers to significantly influence modern contraceptive use.

Crucially, the results of this study are consistent with some of the illustrations in the conceptual framework which defines the relationship between the dependent (outcome) and independent variables in chapter two. This conceptual framework predicted that, individual factors (such as age, marital status, educational level etc), societal factors (partners support, public perception, religious beliefs and practices as well as health service factors (positive attitudes of health workers) could influence contraceptive use among adolescents. The findings of this study largely support the framework that was discussed in chapter two.

5.4 Explanation of findings and implications

The perception that having knowledge of contraceptives will automatically result into contraceptive usage does not apply to all situations. One of such situations can be related to this study. This study reported that 87.6% of respondents had heard about modern contraceptive and 42.1% (of the 87.6%) indicated that modern contraceptive use was 100% protective from
pregnancy. The high knowledge of modern contraceptive among adolescents may be because of education and advocacy through outreach programmes in the communities and school health activities carried out by health workers (community health nurses especially) and by teachers in school. Findings of the study throws light on the fact that, some of the sources from which respondents had heard about modern contraceptive included health workers, teachers, peers and the media (radio).

As a result, it is important that such persons provide adolescents precisely with the right information about modern contraceptives and encourage them to use them (modern contraceptives) to avoid or prevent STIs including HIV/AIDS, unplanned pregnancy and even death in the worse situations (abortion).

Other factors which could have contributed to the high knowledge could be related to activities run by some NGOs with focus on adolescent sexual and reproductive health, thus the prevention of teen pregnancy and early marriage, hence, promote girl child education. One of such NGOs is FAWE Ghana (Federation for African Women Educationist), and in most of their advocacy activities, they used peer educators which is one way of reaching a substantial number of adolescents.

The low prevalence (22.0%) of modern contraceptive use among adolescent was found to be influenced by factors such as age, educational level, marital status and partners consent among others. This could be linked to the fact that the more an individual advance in age, the better his/her ability to make decisions concerning his/her life. This could have accounted for adolescents aged 17 -19 years to be more likely to use modern contraceptives compared to those aged 14 – 16 years. Also in most African culture, premarital sex is not permitted or allowed and this could have contributed to the relatively low contraceptive use among the adolescents surveyed.
The study also demonstrated that, educational status of adolescents influenced modern contraceptive use. Thus, the more one attains higher educational status, there is the tendency the adolescent will use contraceptive. It is believed that, the more an individual attains higher educational status, the more exposed and mind broadened one becomes in many fields of life. Thus, the individual also gains the knowledge of searching and acquiring any kind of information of interest and useful to him/her.

Therefore, based on this, adolescents in SHS are more likely to use modern contraceptive compared to those in JHS and then primary level. The study indicated that, 54.4% of respondents used long term method while 45.6% used short-term contraceptive methods. Out of the 54.4% long term modern contraceptive users, 83.6% are within age 17 -19 years. Already, literature has it that women of older age use long term modern contraceptives compared to those in the younger age (14 – 16 years).

These can be applied to this situation and the other fact might also be that, because majority of this age group are in JHS, they will want to delay child bearing in order to be able to complete school. Hence, the reason for the preference of long term modern contraceptive method. This could potentially help prevent teenage pregnancy and its complications such as high mortality among this group of adolescents and hence, prevent early marriage in adolescents and reduce the girl child drop- out rate in school, thereby promoting effective learning in school.

The other factors that were found to influence adolescents use of modern contraceptives included the positive attitude of health workers and the stigmatization of adolescent contraceptive users by the public. The attitude of health workers is generally key in the line of service delivery because patients trust that anything concerning their health can be held confident by the service provider. Therefore, when the experience of the adolescent does not depict what she has already conceived about the health worker, they turn to be a break in trust,
hence, this may serve as a barrier to the adolescent to access any form of health services, most especially, services related to their sexuality at the health facility.

On the contrary however, positive attitude of health workers towards these adolescents will help promote contraceptive use, hence, increasing the prevalence among adolescents and thereby, reducing the rate of teenage pregnancy, abortions, early marriages and school drop-out. The perception that adolescents who use contraceptives are promiscuous and stigmatisation against them by the public may be due to ignorance and or lack of education and knowledge of the importance of modern contraceptive to the sexual active adolescent. If this is not addressed properly, the challenges and consequences adolescents suffer as a result of this stigma may aggravate. It is therefore important that these issues are addressed.

5.5 Strength and limitation

This study has added new knowledge to the already existing knowledge about modern contraceptives use among adolescents in the Nabdam district. This knowledge could help in the development of health policies and interventions that could address the sexual and reproductive health needs of adolescents. Despite this, the study has some limitations. First, there are three sub-districts within the Nabdam district but only one of the sub districts was considered in this study. In addition, only a sample of 261 adolescents were interviewed. Therefore, the limitation of generalising the results is acknowledged. Second, the nature of the questionnaires and interview was such that respondents were expected to recall past events. This could have introduced recall bias.

Finally, the research design that was used in this study was not possible to directly identify cause and effect of the independent variables that were considered to affect the outcome variable as the study design only looks at events at a specific time.
5.6 Chapter summary

This chapter discussed the results of the study. The discussion of the results suggested that irrespective of the elevated level of awareness and knowledge of modern contraceptive among adolescents in Nabdam district, modern contraceptive usage is still low. Some individual, societal and health service factors were found to be associated with modern contraceptive usage. The findings and discussions highlight the need for the development of pragmatic interventions to improve modern contraceptive use among adolescents in the Nabdam district, hence, promoting a healthy sexual adolescent health. Specific recommendations are outlined in the next chapter.
CHAPTER SIX

6.0 CONCLUSIONS AND RECOMMENDATIONS

6.1 Conclusion

Findings suggest that notwithstanding the fact that majority of respondents have heard about modern contraceptives and know about modern contraceptive methods, the prevalence of modern contraceptives was low. Some of the factors such as age, educational status and marital status of adolescents were significantly associated to modern contraceptive use. Other related factors such as peer influence, partner consent/ support and negative attitude of health workers influenced the use of modern contraceptives.

This study therefore, concluded that, increasing usage of modern contraceptive will require a community- base approach with the aim of promoting the factors that promote usage and breaking the barriers, hence, facilitating modern contraceptive usage, and fostering a healthy adolescent sexual and reproductive health.

6.2 Recommendations

Considering the findings of the study, the following recommendations are made to help address barriers and promote the use of modern contraceptives among adolescents.

First, both GHS and GES to institute programmes and activities that will allow adolescents the opportunity to be exposed more (awareness and knowledge) to modern contraceptives, its use and their sexuality and reproductive health.

The GHS, through its School Health Education Programme (SHEP), could improve activities by intensifying talks, organising drama, debates and introducing peer educators (who have been victims of teenage pregnancy) as resources persons to share their experiences and educate their peers on their sexuality and reproductive health challenges.
Also, the GES should intensify education on adolescent sexually and reproductive health rights from upper primary through to senior high school level while the GHS should intensify education on modern contraceptive use, sexual and reproductive health challenges of the adolescent in school and those out of school through outreach programmes, mother to mother support group discussions and durbars.

The creation of adolescent health corners both in schools and in health facilities with well-trained young health workers as well as peers of these adolescents within their communities to provide sexual and reproductive health services (including modern contraceptives) to the adolescents could help.

Similarly, the GHS could collaborate with NGO(s) in health to form very active adolescent clubs within the community with the focus of addressing the sexual and reproductive health needs (contraceptive use) of adolescent through educative talks, drama performance and videos shows.

Second, GES and GHS should plan and develop positive behaviour change programmes through drama, introducing mentor and mentee concept and using peer educators resource persons to facilitate during programmes. These are some of the ways that could excite and motivate adolescents to cultivate the habit of living responsible and healthy sexual lifestyles including contraceptive use. This could help curb or prevent infection and spread of STIs and HIV/ AIDS.

Third, GHS should organize training and refresher programmes on customer care and BCC (behaviour change communication) for health workers to help improve attitudes, hence, facilitating effective and efficient service delivery especially, for adolescents.

GHS should encourage men/partners (male spouse) to take interest in the health (sexual needs) of their spouse/partners by using men who accompany their wives to health facility especially
during ANC and PNC as advocates of change (change agents) to reach out to the male population through community durbars, and focus group discussions.

The health service delivery system should also make the facility especially, the family planning units/clinics men/ male friendly

Also, more public health educational programmes together with other interventions should be carried out by GHS to increase the prevalence of modern contraceptive usage among adolescents, especially, the sexually active.

Finally, knowledge they say is power and the key to success, therefore, ensuring that adolescents are given the right information on modern contraceptives, focusing on the types, effects, duration of methods as well as direction on how to take full control of their lives will be critical. Families especially, should realise that the home is the first school of every child and therefore, it is very important to educate the adolescent on her sexuality and how to live responsibly, most especially, on modern contraceptive use. If this is consciously put in place, the adolescent will leave responsibly, hence, preventing STIs, HIV/AIDS and teenage pregnancy and early adolescent marriages.
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APPENDICES

APPENDIX 1: CONSENT FORM

APPENDIX 1A: CONSENT FORM FOR STUDY PARTICIPANTS 18 YEARS AND ABOVE

Project Title: Factors influencing adolescents’ usage of modern contraceptives in Nabdam District.

Institution of affiliation: School of Public Health, University of Ghana, Legon.

Purpose of Research

My name is Ayinne Agambila Angela, a master of public health student at the school of public health, University of Ghana. I am conducting a study on Factors influencing adolescents’ usage of modern contraceptives in the Nabdam district. I am interested in understanding the level of knowledge of modern contraceptive among adolescents in the Nabdam district, whether adolescents in the district use modern contraceptives. I equally want to know the factors that influence the use of modern contraceptives among adolescents in Nabdam district. I will greatly appreciate your participation in my study. Your insight will assist me understand the reasons behind use of modern contraceptive and adolescent pregnancy.

Research Procedure

If you agree to be in this study, you will be asked to answer questions about yourself as well as questions about the factors that influence use of modern contraceptive. These questions will be asked in a form of individual interview using an interviewer administered structured questionnaire. The interview will take about 10 – 15 minutes.

Risks and benefits: There are minimum or no risks if you take part in this study. There are also no incentives but the information you provide will help you improve on your health and that of your loved ones.
Voluntary Nature of Participation

If you decide to participate in this study, you are free to answer the questions with much or as little details as you wish and feel comfortable to explain. You are also at liberty not to answer particular questions or withdraw from the study at any time for any reason with no penalty.

Compensation

There is no monetary compensation or incentive for this study. Participation is voluntary.

Confidentiality

You are assured of strict anonymity and confidentiality on any information you give. Only the research team will have access to the answered questionnaires. Confidentiality and privacy will be maintained by keeping all materials under lock and key. Your name will not be recorded. Instead, all data files will be coded and stored in randomly selected identification number making it impossible to identify you or your answers in anything written about this study.

Contact and Questions

If you have any further information or questions about the study, you may contact the principal investigator, Ayinne Agambila Angela on phone number: 0208801982

Or email: angelaayinne@yahoo.com
**Your rights as a Participant:** This research has been reviewed and approved by the Ethical Review Committee of the Ghana Health Service. If you have any questions about your rights as a research participant you can contact the ERC administrator Ms. Hannah Frimpong on 0243235225 or 0507041223 between the hours of 9am – 4pm on Monday to Friday.

**Statement of Consent**

I have read the information above, or it has been read to me. I consent voluntarily to be a participant in this study.

Name of Participant: ……………………………………………………

Signature or Thumb print of Participant: …………………………………………………

Date: ……………………………………………………

Thank you for agreeing to participate.

Name of witness: ……………………………………………………

Signature or Thumb print of witness: ……………………………………………………

Date: ……………………………………………………

I confirm that the individual has not been coerced into giving consent, and the consent has been given freely and voluntarily.

Name of Researcher or Principal investigator: ……………………………………………………

Signature of Researcher: …………………………………………………

Date: …………………………………………………………………
APPENDIX 1B: ASSENT FORM FOR STUDY PARTICIPANTS BELOW 18 YEARS

**Project Title:** Factors influencing adolescent usage of modern contraceptives in the Nabdam district.

**Institution of affiliation:** School of Public Health, University of Ghana, Legon.

**Purpose of Research**

My name is Ayinne Agambila Angela, a master of public health student at the school of public health, University of Ghana. I am conducting a study on Factors influencing adolescents’ usage of modern contraceptives in the Nabdam district. I am interested in understanding the level of knowledge of modern contraceptive among adolescents in the Nabdam district, whether adolescents in the district use modern contraceptives. I will equally want to know the factors that influence the use of modern contraceptives among adolescents in Nabdam district. I will greatly appreciate your participation in my study. Your insight will assist me understand the reasons behind use of modern contraceptive and the prevalence of adolescent pregnancy.

**Research Procedure**

If you agree to be in this study, you will be asked to answer questions about yourself as well as questions about the factors that influence your use of modern contraceptive. These questions will be asked in a form of individual interview using an interviewer administered structured questionnaire. This will take between 10 – 15 minutes.

**Risks and benefits:** There is no risks if you take part in this study. There are also no incentives but the information you provide may help in the improvement of policies on your sexual and reproductive health matters.

**Voluntary Nature of Participation**

If you decide to participate in this study, you are free to answer the questions with much or as little details as you wish and feel comfortable to ask any question if you do not understand for further explanation. You are also at liberty not to answer particular questions or withdraw from the study at any time for any reason with no penalty.
Compensation

There is no compensation or incentive for this study. Participation is voluntary.

Confidentiality

You are assured of strict anonymity and confidentiality on any information you give. Only the research team will have access to the answered questionnaires. Confidentiality and privacy will be maintained by keeping all materials under lock and key. Your name will not be recorded. Instead, all data files will be coded and stored in randomly selected identification number making it impossible to identify you or your answers in anything written about this study.

Contact and Questions

If you have any further information or questions about the study, you may contact the principal investigator, Agambila Angela on phone number: 0208801982

Or email: angelaayinne@yahoo.com

Your rights as a Participant: This research has been reviewed and approved by the Ethical Review Committee of the Ghana Health Service. If you have any questions about your rights as a research participant you can contact the ERC administrator Ms. Hannah Frimpong on 0243235225 or 0507041223 between the hours of 9am – 4pm on Monday to Friday.

Statement of Consent

I have read the information above, or it has been read to me. I consent voluntarily to be a participant in this study

Name of Participant: ……………………………………………………..

Signature or Thumb print of Participant: ……………………………………………

Date: …………………………………………………..

Thank you for agreeing to participate
Name of witness: ……………………………………………………..

Signature or Thumb print of witness: ……………………………………………………..

Date: ……………………………………………………………

I confirm that the individual has not been coerced into giving consent, and the consent has been given freely and voluntarily.

Name of Researcher or Principal investigator: ………………………………………

Signature of Researcher: ……………………………………………………………

Date: ……………………………………………………………
APPENDIX 1C: CONSENT FORM FOR PARENT OR GUARDIAN OF PARTICIPANTS BELOW 18 YEARS

**Project Title:** Factors influencing adolescents’ usage of modern contraceptives in the Nabdam District.

**Institution of affiliation:** School of Public Health, University of Ghana, Legon.

**Purpose of Research**

My name is Ayinne Agambila Angela, a master of public health student at the school of public health, University of Ghana. I am conducting a study on Factors influencing adolescents’ usage of modern contraceptives in the Nabdam district. I am interested in understanding the level of knowledge of modern contraceptive among adolescents in the Nabdam district, whether adolescents in the district use modern contraceptives. I also want to know the factors that influence the use of modern contraceptives among adolescents in the Nabdam district. I will greatly appreciate your child/guardian participation in my study. The insight of your child/guardian will assist me understand the reasons behind use of modern contraceptive and issues of adolescent pregnancy.

**Procedure:**

If your child/guardian agrees to be in this study, they will be asked to answer questions about themselves as well as questions about the factors that influence use of modern contraceptive among adolescent. These questions will be asked in a form of individual interview using an interviewer administered structured questionnaire. The interview will take about 10 – 15 minutes.

**Risks and benefits:**

In this study, there will be questions concerning level of knowledge, sexual behavior and attitudes that may be embarrassing and or unusual. However, the risk of participation will be no greater than those encountered on day –to-day basis. If this document is adopted, it may benefit your child/guardian and the whole community in dealing with the issue of modern contraceptive use. The study would help health providers to plan how to curb the incidence of teenage pregnancy in the municipality.

**Voluntary Nature of Participation**
If your child/guardian decides to participate in this study, they are free to answer the questions with much or as little details as they wish and feel comfortable to explain. They are also at liberty not to answer particular questions or withdraw from the study at any time for any reason with no penalty.

**Compensation**

There is no compensation or incentive for this study.

**Confidentiality**

You are assured of strict anonymity and confidentiality on any information your child/guardian gives. Only the research team will have access to the answered questionnaires. Confidentiality and privacy will be maintained by keeping all materials under lock and key. Their names will not be recorded. Instead, all data files will be coded and stored in randomly selected identification number making it impossible to identify them the answers they give in this study.

**Contact and Questions**

If you have any further information or questions about the study, you may contact the principal investigator, *Ayinne Agambila Angela* on phone number: 0208801982 Or email: angelaayinne@yahoo.com

**Your rights as a Parent or Guardian**

This research has been reviewed and approved by the Ethical Review Committee of the Ghana Health Service. If you have any questions about the rights of your child/ guardian as a research participant you can contact the ERC administrator Ms. Hannah Frimpong on 0243235225 or 0507041223 between the hours of 9am – 4pm on Monday to Friday.

**Statement of Consent**

I have read the information above, or it has been read to me. The study has been explained to me and my questions have been answered. I consent voluntarily for my child to be a participant in this study.

Name of Parent or Guardian: .................................................................

Signature or Thumbprint of Parent or Guardian: ..................................................
Date: .................................................................

Thank you for agreeing for your child to participate

Name of Researcher or Principal investigator: ....................................................

Signature of Researcher: .................................................................

Date: .................................................................................
APPENDIX 2: QUESTIONNAIRE

UNIVERSITY OF GHANA, LEGON

SCHOOL OF PUBLIC HEALTH

INTERVIEW SCHEDULE FOR ADOLESCENTS

Greetings, my name is…………………………………………... I am a member of a team from the University of Ghana conducting a research on factors influencing adolescents’ usage of modern contraceptive in the Nabdam district. If you agree to take part in this study, I will read and explain the questions to you and your response will be recorded by me. The questions will take about 10 to 15 minutes.

Your responses to all questions will be confidential and will not be shared with anyone other than members of the study team. No answer is wrong.

Your participation in the study is voluntary and you are free to end the interview process at any time. However, I will be happy if you participate in the study to contribute to existing knowledge on modern contraceptive use and non-use.

Date…………………………………………

Study Site…………………………………..

Code………………………………….……

Code of interviewer……………………….

PARTICIPANTS’ INSTRUCTIONS

Do not write your name; tick only one correct response and multiple responses where applicable.

Only adolescent aged between 15-19 years are eligible for this study.

Demographical characteristics


5. Who do you stay with? A. Parents [ ] B. partner [ ] C. guardian [ ] E. self [ ]


8. What is the occupation of your father? ………………………

9. What is the occupation of your mother? ………………………

Awareness and knowledge of modern contraceptives

10. Have you ever heard about contraceptives? A. Yes [ ] B. No [ ] (if no, skip to 18)


12. Have you ever heard of any type of contraceptive method? A. Yes [ ] B. No [ ] (if no skip to Ques. 19)

13. Have heard of modern contraceptive? A. Yes [ ] B. No [ ]

14. If YES, tick from the list the methods you have heard before. A. IUD [ ] B. Pills [ ] C. Female condom [ ] D. Injectable [ ] E. Lactation amenorrhea (LAM) [ ] F. Others specify ………………………


16. Do you know where you can get any of these contraceptives ticked above within the community? A. Yes [ ] B. No [ ]
17. If YES, where is this place? A. Clinic [ ] B. Drug store [ ] C. Health worker [ ] D. Family planning clinic [ ] E. Peers/ friends [ ] F. Family members [ ]

18. Can a girl become pregnant the first time after having unprotected sex? A. Yes [ ] B. No [ ]

19. Do you think the use of modern contraceptives during sexual intercourse provides 100% protection from becoming pregnant? A. Yes [ ] B. No [ ] C. Don’t know [ ]

20. Do you think the use of contraceptives is the decision of the woman and therefore, the man should not worry about it? A. Yes [ ] B. No [ ]

21. Women who use contraceptive may become promiscuous? A. Yes [ ] B. No [ ]

**Modern contraceptive use among adolescents**

22. Have you ever had sex? A. Yes [ ] B. No [ ] if no skip to 27

23. How old were you? ...........

24. Did you use a condom or any contraceptive? A. Yes [ ] B. No [ ]

25. Have you ever used a contraceptive before? A. Yes [ ] B. No [ ] (if no, skip to 27)


27. Are you currently using a contraceptive method? A. Yes [ ] B. No [ ]

28. If YES which one are you using? A. IUD [ ], B. Pills [ ] C. Implants [ ] D. Female condom [ ] E. Injectable [ ] F. LAM [ ] G. other, specify

29. If NO why have you stopped using? A. To become pregnant [ ] B. Side effects [ ] C. Others, specify...


31. How long have you been using modern contraceptives? Specify …...

32. Do you know that some of the modern contraceptives are short term and others are long term? A. Yes [ ] B. No [ ]
33. The modern contraceptive that last for modern three months and above is long term? A. Yes [ ] B. No [ ]

34. Which of them would you prefer using? A. Long term [ ] b. short term [ ]

35. Why would you prefer the short term? Specify……

36. Why would you prefer the long term? Specify ……..

37. How often do you use any of the methods? A. Every time [ ] B. Once a while [ ] C. Not at all [ ] D. Others, specify ………


39. Who is the right person to use contraceptives? A. Married couple [ ] B. Not married people [ ] C. All sexual active people [ ] D. Adults [ ] E. Others, specify ……..

40. Did you use any modern contraceptive the last time you had sex? A. Yes [ ] B. No [ ] C. Not applicable [ ] if no, skip to Quest. 44.

41. What type of modern contraceptive did you use? A. IUD [ ], B. Pills [ ] C. Implants [ ] D. Female condom [ ] E. Injectable [ ] F. LAM [ ] G. Other, specify

42. Who made the decision for the contraceptive use the last time you had sex? A. You [ ] B. Partner [ ] C. Peers [ ] D. Parents [ ] E. Others, specify ….

43. If you wanted to use a modern contraceptive could you get any by yourself? A. Yes [ ] B. No [ ]

44. If YES, which one would you use? A. IUD [ ] B. Pills [ ] C. Implants [ ] D Female condom [ ] E. Injectable [ ] F. LAM[ ] G. other, specify

45. How many sex partners do you have? ………

46. How many sexual partners have you had within the last 12 months? ……………

47. Have you ever had sex while drunk? A. Yes [ ] B. No [ ] if no skip to Ques. 51

48. If yes to the above, did you or your partner use a contraceptive? A. Yes [ ] B. No [ ]

49. If yes to the above, was it your idea? A. Yes [ ] B. No [ ]

50. Do you feel pressurized to have unprotected sex? A. Yes [ ] B. No [ ]

51. If yes to the above, from whom? A. Partner [ ] B. Relatives [ ] C. Other, specify …
52. Do you think sex education can influence modern contraceptive use? A. Yes [ ] B. No [ ]

53. Do you receive sex education from home? A. Yes [ ] B. No [ ]

54. Do you receive sex education from school? A. yes [ ] B. no [ ]

55. Does your syllabus include sex education? A. yes [ ] B. no [ ] C. don’t know [ ]

**Factors influencing adolescent use of modern contraceptives**

56. Are there any cultural beliefs and practices that prevent the use of modern contraceptive use? A. yes [ ] B. no [ ] C. don’t know [ ]

57. If yes to the above, can you mention them? ..........................

58. Is there any religious belief and practice that prevents the use of modern contraceptives? A. yes [ ] B. no [ ] C. don’t know [ ]

59. If yes to the above, can you mention them? ..........................

60. What will be your reason to use modern contraceptive? A. Good attitude of health workers [ ] B. availability of service points [ ] C. partner support [ ] D. knowledge of modern contraceptives [ ] E. religious beliefs [ ] F. peer influence [ ] G. parent support [ ]

61. Will the guidance or support of your parents or guardian on issues related to sexual reproductive health determine whether you will use modern contraceptives during sex? A. Yes [ ] B. No [ ]

62. Will you use a modern contraceptive during sex if your friend encouraged you to do so? A. Yes [ ] B. No [ ]

63. Can you walk to any health facility to access any type of modern contraceptive? A. Yes [ ] B. No [ ]

64. If yes why will you go and if no, why will you not go? ........................................

65. Will you be ready to go to any health facility to access any type of modern contraceptive? A. Yes [ ] B. No [ ]

66. If Yes why, and if No why?........................................................................................................

67. Will you be confident to go to any facility if there is a place made specially to take care of sexual reproductive health related issue of adolescents? A. Yes [ ] B. No [ ]

68. If Yes why, and if No why?............................
69. Will you be ready to go to any health facility to access any type of modern contraceptives if there are different types of modern contraceptives? A. Yes [  ] B. [  ]

70. If Yes why, and if No why?..............................................................

71. Will the positive attitude of a health service provider encourage you access any modern contraceptive method? A. Yes [  ] B. No [  ]

72. Does your religious belief or practice prevent you from using modern contraceptives? A. Yes [  ] B. No [  ]

73. Can you use any modern contraceptive without the consent of your partner? A. Yes [  ] B. No [  ]

74. Does the public perceive adolescents especially females who use modern contraceptives as promiscuous? A. Yes [  ] B. No [  ]

75. If yes to the above, will this perception of the public stop you from using modern contraceptives? A. Yes [  ] B. No [  ]