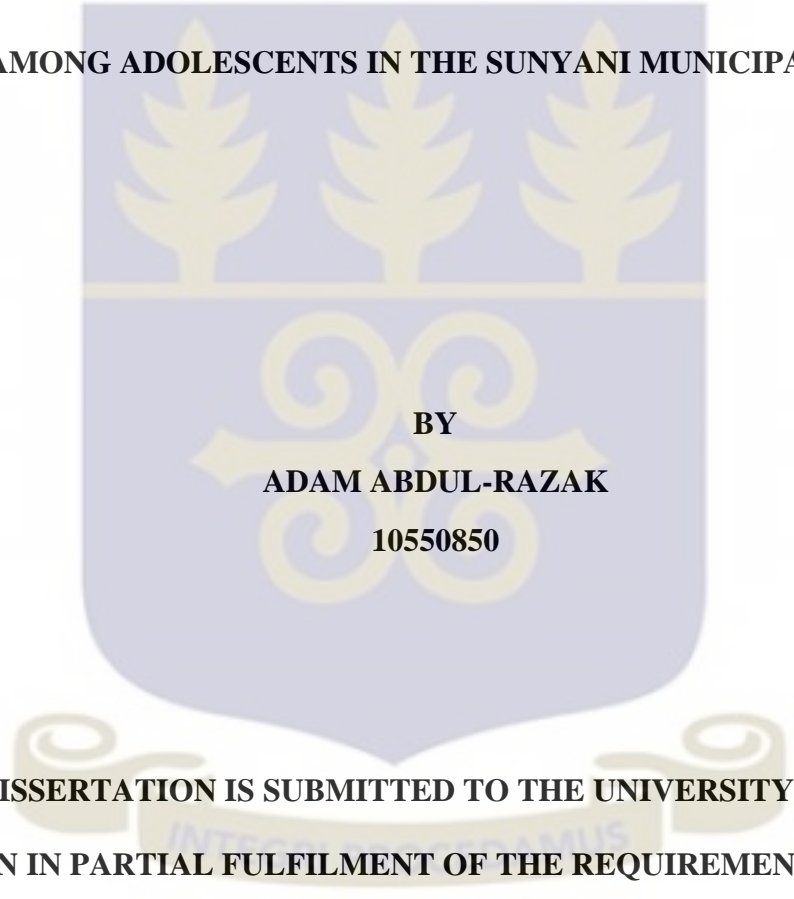


**SCHOOL OF PUBLIC HEALTH  
COLLEGE OF HEALTH SCIENCES  
UNIVERSITY OF GHANA**

**FACTORS INFLUENCING NON-USE OF MODERN CONTRACEPTIVES  
AMONG ADOLESCENTS IN THE SUNYANI MUNICIPALITY**

The background of the central text area features a large, light purple watermark of the University of Ghana crest. The crest is a shield-shaped emblem with a blue field. The upper portion contains three golden palm trees. The lower portion contains a golden scroll with the Latin motto 'INTEGRA FIDELITAS'.

**BY  
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**THIS DISSERTATION IS SUBMITTED TO THE UNIVERSITY OF GHANA,  
LEGON IN PARTIAL FULFILMENT OF THE REQUIREMENT FOR THE  
AWARD OF THE MASTER OF PUBLIC HEALTH DEGREE**

**JULY, 2016**

## DECLARATION

I, Adam Abdul-Razak, hereby declare that except for previously published and unpublished works which have been duly acknowledged, this dissertation is my own work put together as a result of an independent effort under the supervision of Dr. John Kuumuori Ganle of the School of Public Health, University of Ghana, Legon.

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.....  
Date

.....  
Dr. John Kuumuori Ganle  
(Academic Supervisor)

.....  
Date



## DEDICATION

To my mother Hajia Sawudatu Daadaa Abudu and the entire family.



## ACKNOWLEDGEMENT

I wish to thank the Almighty God for his divine protection and guidance throughout this course. You never promised that the journey will be easy but you promised that your grace and mercy will see me through. Indeed, your grace and mercy have seen me through and I am grateful to you Almighty God. I would also like to express my profound gratitude to my supervisor Dr. John Kuumuori Ganle for his guidance, suggestions and the many efforts he put in making sure that this study comes out well. Many thanks go to the entire staff of the School of Public Health, especially those in my department for their encouragement and support. I am also deeply grateful to Dr. Timothy Letsa, Regional Director of Health Service, Brong Ahafo, for his advice and support throughout my course.

My profound gratitude goes to the entire staff of The Palladium Group; I couldn't have made it without your help and sponsorship. To my mother Hajia Sawudatu Daadaa Abudu and the entire Abudu and Adam progress family I say God richly bless you for your support in diverse ways. I am so much grateful to Mr. David Logan, Mr Moses Liyobe Nanang and Bernard Yeboah-Asiamah, God bless you for your support.

I wish to acknowledge the help given to me by the Brong Ahafo Regional Health Directorate. I am also grateful to all my study mates for challenging and encouraging me to learn especially Emmanuel Blessing.

To everyone who helped and supported me through this course, I say God richly bless.

## ABSTRACT

**Background:** There is evidence that modern contraceptive use among adolescence in low-income countries, including Ghana, is very low. However, few empirical research has been done in the Sunyani municipality of Ghana - a place where teenage pregnancy is very high - to identify factors influencing non-use of modern contraceptives. This study therefore aimed to determine the factors influencing non-use of modern contraceptives among adolescents in the Sunyani municipality.

**Methods:** The study employed a cross sectional survey design. A structured, closed-ended questionnaire was used, which enquired into adolescents' knowledge, use and non-use of modern contraceptives and their sexual behaviours. Descriptive, bivariate and logistic regression analysis techniques were used to analyse, present the data and the level of significance.

**Results:** The study suggest that majority of the respondents (95.4%) had heard about contraception. However contraceptive prevalence was low. Socio-demographic factors such as the age and educational status of adolescents were significantly associated with non-use of modern contraceptives. Other reasons for non-use of modern contraceptives included lack of knowledge of contraceptive methods and partners being opposed to use of modern contraceptives.

**Conclusions:** Based on these findings, the study recommends more public health education alongside other interventions to increase contraceptive prevalence among adolescents who are sexually active.

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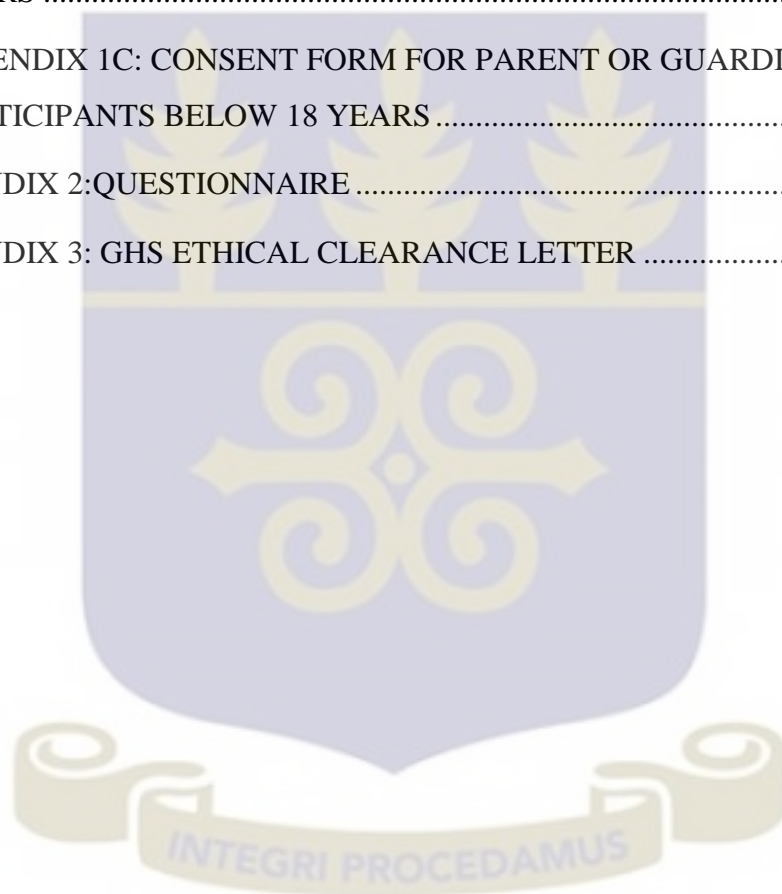
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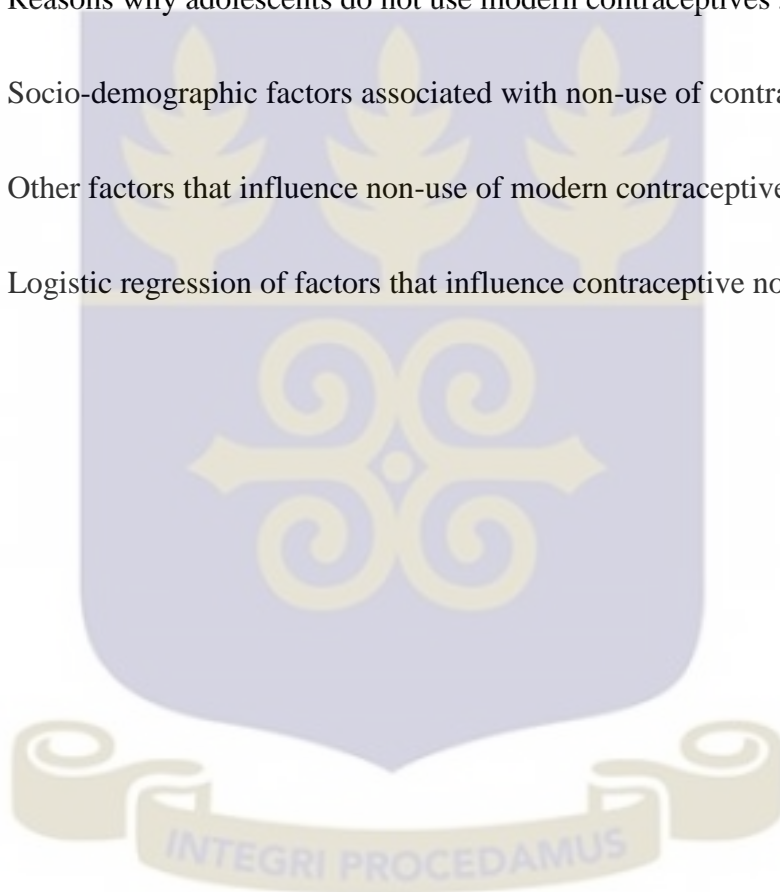


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## LIST OF ABBREVIATIONS

ASRH	Adolescent Sexual and Reproductive Health
COC	Combined Oral Contraceptive
GDHS	Ghana Demographic and Health Survey
GHS	Ghana Health service
GSS	Ghana Statistical Service
HIV	Human Immunodeficiency Virus
IUD	Intrauterine Device
LAM	Lactational Amenorrhoea Method
LMICS	Low and Middle Income Countries
STI	Sexually Transmitted infection
UNFPA	United Nations Population Fund
UNICEF	United Nation Children’s Fund
WHO	World Health Organization



## CHAPTER ONE

### INTRODUCTION

#### 1.1 Background

An estimated 16 million adolescents aged 15–19 give birth each year worldwide (Chandra-Mouli & Hainsworth, 2014). Complications from pregnancy and childbirth are the leading cause of death in girls aged 15-19 in Low and Middle Income Countries (LMICs) (Chandra-Mouli & Hainsworth, 2014). Perinatal deaths are significantly higher in babies born to adolescent mothers than in those born to mothers aged 20–29 years, as are other problems such as low birth weight (Chandra-Mouli & Hainsworth, 2014). Preventing adolescent pregnancy is a key strategy in improving maternal and infant outcomes.

Worldwide there are over 1.8 billion adolescents, and nearly 90 percent of them live in LMICs (UNFPA, 2005). Adolescence is a period characterised by increased exploration and exposure to risk-taking behaviours, including unsafe sex (Gomes et al, 2006). Globally, most young people become sexually active before their 20th birthday (UNFPA, 2005), and in sub-Saharan Africa, 75% of young women report having had sex by age 20 (Blum, 2007). Unprotected sexual intercourse among adolescents can lead to an unwanted adolescent pregnancy, which is often considered a serious social and public health problem (Gomes et al, 2006; Mestad et al, 2011). Promoting contraceptives use and safe sexual behaviour among young people is therefore considered essential to curbing such adverse reproductive health outcomes (Bearinger, Sieving, Ferguson & Sharma, 2007). It has been estimated that about one-third of maternal deaths and close to one-tenth of child mortality globally could be prevented annually with the help of family planning programmes (Gomes et al, 2006). Thus, by

allowing women to postpone motherhood, space births and cease childbearing, contraceptives use reduces unwanted pregnancies and the demand for abortion (Cleland, Ali, & Shah, 2006).

Adolescent sexuality in most of sub-Saharan Africa has raised a lot of concern in view of low contraceptives use, unplanned pregnancies and sexually transmitted infections including human immunodeficiency virus or acquired immunodeficiency syndrome (HIV/AIDS). One of the more serious challenges facing family planning programmes particularly in sub-Saharan Africa is how to address the reproductive health needs of adolescents as they initiate sexual activity and are exposed to the risk of pregnancy (GSS, 2013). For instance, some recent studies suggest that modern contraceptive use among adolescents in sub-Saharan Africa is still very low (Yoder et al, 2011). Among the few who use modern contraceptives, majority use them just for child spacing and not for the limiting of the number of children (Yoder et al, 2011).

The issue of low contraceptives use is also a major health challenge in Ghana. Current use of any contraceptive method in Ghana is 23% among all women (GSS, 2014). However, there are disparities: 27% among currently married women, and 45% among sexually active unmarried women (GSS, 2014). Among currently married women, 22% are using a modern method and 5% are using a traditional method (GSS, 2014). Contraceptive use also varies with a woman's age. It is lowest among the youngest women aged 15-19 (19 %) (GSS, 2014). This challenge is even greater in the Brong Ahafo Region where teenage pregnancy is on the increase, particularly in the Sunyani Municipality (Sunyani Municipal Health Directorate, 2014). The total number of deliveries recorded in the Brong Ahafo Region for the year 2013 was 65,815. Out of this figure, teenage girls who gave birth constituted 25,391 or 38.6% of the total deliveries (Sunyani Municipal Health Directorate, 2014). The high percentage of

teenage pregnancies in the Sunyani Municipality suggests that contraceptives are probably not being used by adolescents. It is therefore important that research is conducted to identify the factors that may be influencing the non-use of modern contraceptives in the municipality. To this end, this study proposes to examine the factors influencing non-use of modern contraceptives among adolescents in the Sunyani municipality.

## **1.2 Statement of Problem**

In spite of continuous global investments in adolescent sexual and reproductive health (ASRH) programmes, constraints such as limited knowledge and lack of access to resources as well as services still exist (WHO, 2011). These constraints are particularly evident in sub-Saharan Africa where unintended pregnancies and adolescent childbearing continue to be a burden (Nyarko, 2015). In many parts of the region, adolescent sexuality and reproductive health remains a highly charged moral issue, which is compounded by the fact that in most cases, reproductive health services in the region are not oriented towards adequately meeting the needs of adolescents (Nyarko, 2015).

Like many countries in sub-Saharan Africa, trends in family planning indicators, total fertility rate and contraceptive use in Ghana have been improving (UNICEF, 2011). This notwithstanding, there is a challenge of increasing access and knowledge to many adolescents (UNICEF, 2011). In Ghana, as high as 16.2% of adolescent girls gave birth by age 18 years between 2006 and 2010 (UNICEF, 2011). According to the Guttmacher Institute (2004), one in 10 births occurs among adolescent mothers. In addition to this challenge of early childbirth, teenage pregnancy is also increasing. Teenage pregnancy and motherhood is a major social and health issue in Ghana. Early teenage pregnancy can cause severe health problems for both the mother and child. Moreover, an early



start to childbearing greatly reduces women's educational and employment opportunities and is associated with higher levels of fertility (GSS, 2014).

The Ghana demographic health survey 2014 shows that 14% of women aged 15-19 have begun childbearing; either they have had a live birth (11%) or are pregnant with their first child (3%), a slight increase from 13% in 2008. Teenage childbearing is higher in rural areas (17%) than in urban areas (12%). By region, the percentage of teenage girls who have begun childbearing ranges from 8% in the Greater Accra region to 21% in the Brong Ahafo and 22% in the Volta region (GSS, 2014).

Furthermore, since a substantial proportion of abortion among this group takes place outside modern health facilities without professionally trained health officers (GSS, 2014), post-abortion complications, including even death in extreme cases, cannot be downplayed. For example, as high as 30% of women and 39% of men 12-24 years in Ghana reported that the last abortion they were involved in took place at home (GSS, 2014).

In the Brong Ahafo region, the situation of teenage pregnancy is not different from what is happening in other parts of the country. Despite all the efforts put into awareness and use of modern contraceptives by Ghana's Ministry of Health, the Ghana Health Service, the Municipal Health Directorate and NGOs in the Sunyani municipality, teenage pregnancy is still a serious development and public health issue. The number of teenage girls who were pregnant during the Basic Education Certificate Examination increased from 77 in 2010 to 111 in 2011, and further increased to 170 in 2012 (Brong Ahafo Health Directorate, 2014). In the Sunyani Municipality in particular, 647 teenage pregnancies were recorded out of the 6766 pregnancies in the year 2012 (Sunyani Municipal Health Directorate, 2014). In the year 2013, 589 out of



the total 6766 pregnancies recorded in the Municipality were adolescents (Sunyani Municipal Health Directorate, 2014). In addition, out of the 1,817 pregnant women who attended antenatal care clinic at the Sunyani Municipal Hospital in 2013, 161 were teenagers or adolescents. Thus adolescents constituted 9% of the total antenatal attendance for the year 2013 (Sunyani Municipal Health Directorate, 2014).

The relatively high percentage of teenage pregnancies in the Sunyani Municipality clearly highlights the fact that adolescents are probably not using modern contraceptives. Indeed, access to modern contraceptive services by adolescents has been reported to be very low not only in the Sunyani Municipality but also in Ghana as a whole (GSS, 2013; GSS, 2014). Previous studies that have attempted to examine contraceptive use among adolescents have suggested that the factors that influence non-use of modern contraceptives among adolescents are multifaceted, including high cost and negative attitudes of service providers (Nyarko, 2015). In Ghana, studies have considered the determinants of contraceptive use among women in the reproductive age group of 15 to 49 (Nyarko, 2015); trends in contraceptive use among female adolescents in Ghana and prevalence and correlates of contraceptive use among female adolescents (aged 15 to 19) (Nyarko, 2015). While these studies have provided useful insights into adolescent contraceptive use behaviours, little is known about the factors influencing non-use of modern contraceptives among adolescents in Ghana more generally and in the Sunyani municipality in particular. While anecdotal evidence in the Sunyani Municipality indicate that negative societal norms towards adolescent sexuality often contribute to the non-use of modern contraceptives among adolescents and the frequent teenage pregnancy experienced in the municipality, no known specific studies have been done to understand the factors influencing non-use of modern contraceptive among adolescents in the Sunyani municipality. This knowledge gap

could potentially hamper effective planning and delivery of adolescent sexual and reproductive healthcare services. Acquiring knowledge about the factors that influence non-use of modern contraceptive methods by adolescents could therefore constitute an important step towards effective delivery of family planning and modern contraceptive services to adolescents. This study therefore seeks to fill this lacuna by investigating the factors influencing non-use of modern contraceptive among adolescents in the Sunyani municipality.

### **1.3 Objectives of the study**

The general objective of this study was to determine the factors influencing non-use of modern contraceptive among adolescents in the Sunyani municipality.

The specific objectives were to:

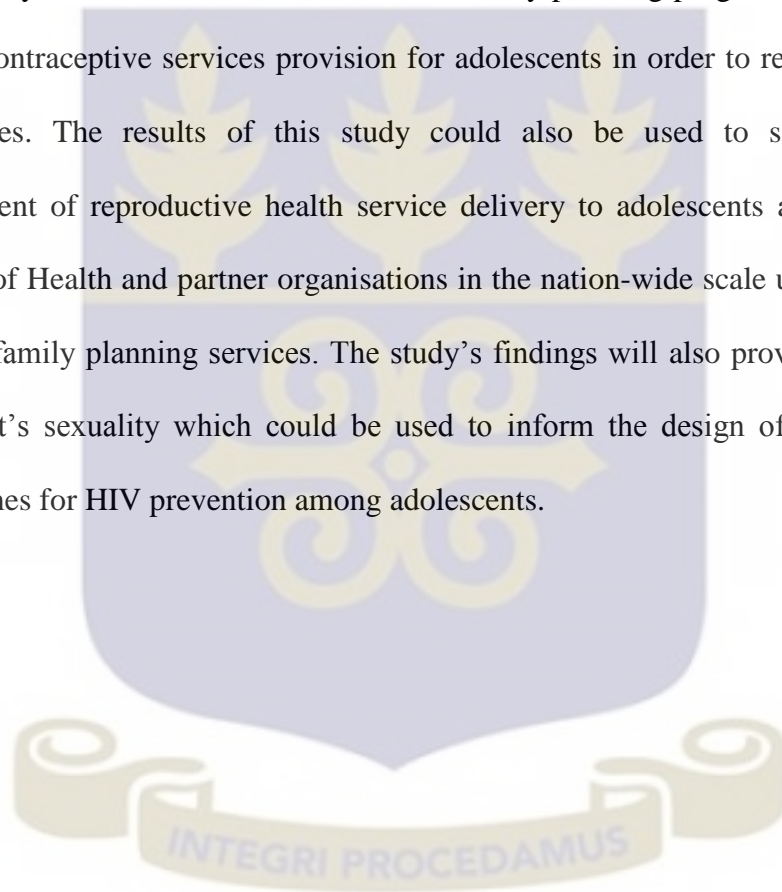
- Assess the level of knowledge of modern contraceptives among adolescents in the Sunyani municipality.
- Assess the level of modern contraceptives use among adolescents in the Sunyani municipality.
- Determine the factors associated with non-use of modern contraceptives among adolescents in the Sunyani municipality.

### **1.4 Research questions**

- What is the level of knowledge of modern contraceptives among adolescents in the Sunyani municipality?
- Do adolescents in the Sunyani municipality use modern contraceptives?
- What factors influence non-use of modern contraceptives among adolescents in the Sunyani municipality?

### **1.5 Rationale for the study**

Adolescent pregnancy is on the rise in Ghana and the Sunyani Municipality is no exception (GSS, 2014). While this may be indicative of low use of modern contraceptives, information regarding the factors that may be influencing the non-use of modern contraceptives in the Sunyani Municipality is lacking. This study hopes to identify factors influencing non-use of modern contraceptives in the Sunyani Municipality. This information could inform family planning programming to improve modern contraceptive services provision for adolescents in order to reduce unintended pregnancies. The results of this study could also be used to strengthen future development of reproductive health service delivery to adolescents and to guide the Ministry of Health and partner organisations in the nation-wide scale up of community based of family planning services. The study's findings will also provide insights into adolescent's sexuality which could be used to inform the design of dual protection programmes for HIV prevention among adolescents.



## CHAPTER TWO

### LITERATURE REVIEW

#### 2.1 Introduction

This chapter reviews literature related to the factors influencing non-use of modern contraceptive among adolescents. The review will particularly discuss awareness and knowledge of modern contraceptives among adolescents, modern contraceptive use among adolescents, and the factors influencing non-use of modern contraceptive among adolescents.

#### 2.2 The Concept of contraception

Contraception is the use of various devices, drugs, agents, sexual practices or surgical procedures to prevent pregnancy (WHO, 2011). They are usually referred to as birth control methods (WHO, 2011). Contraceptives can generally be grouped into two: modern contraceptive methods such as condoms, IUDs, implant, pills and traditional methods such as folklore and withdrawal. The different types of contraceptives are discussed in detail below

#### 2.3 Types of contraceptives

There are many contraceptive drugs and devices that can be used for contraception. For better understanding of these contraceptives, they are grouped and discussed under five broad headings namely; hormonal methods, Intrauterine Contraceptive Device (IUCD), barrier methods, post-coital contraception and natural methods.

##### 2.3.1 Hormonal methods

These comprise of Combined Oral Contraceptive (COC) methods, transdermal combined hormonal patch, transvaginal combined hormonal, Intramuscular combined hormonal injectable and Progestogen-only methods (Obstetricians and Gynaecology,

2004). Progestogen-only method of contraceptives consists of progestogen-only pill, injectable and sub-dermal implants. They thicken the cervical mucus to prevent mobility to spermatozoa and also modify the endometrium to prevent implantation. It is recommended that the daily tablets should be taken at the same time each day (Obstetricians and Gynaecology, 2004). Implants are capsules containing progestogen which are inserted sub-dermally into the inner aspect of the upper arm under local anesthetic (Obstetricians and Gynaecology, 2004). The steroid is released into the body at a constant rate (slightly higher during the first year of use). The steady circulating blood level of steroid gives high contraceptive efficacy. The main indication for Implants is the woman's desire for a highly effective method without the finality of sterilization (Melles, 2007). Combined Oral Contraceptive (COC) methods contain synthetic steroid hormones estrogen and progestogen in varying amounts and the mechanism of action is primarily prevention of ovulation. The benefits of COCs include effectiveness, convenience, reversibility, reduction of most menstrual cycle and no toxicity in overdose (Obstetricians and Gynaecology, 2004). However, the most significant unwanted effects are irregular or prolonged bleeding, amenorrhea and weight gain (Melles, 2007).

### ***2.3.2 Intrauterine Contraceptives Device (IUCD)***

Intrauterine contraceptives device (IUCD) are inserted into the uterus at any point of the menstrual cycle as long as pregnancy has been excluded. Some health practitioners prefer to insert it towards the end of menstruation or just after (Melles, 2007). The IUCD causes an inflammatory response with an increased number of leucocytes which destroy spermatozoa and ova (Melles, 2007). Copper intrauterine contraceptives device affects endometrial enzymes, glycogen metabolism and oestrogen uptake, thus rendering the endometrium hostile to implantation (Melles, 2007). Advantages of

copper IUDs include safety, effectiveness, high continuation rates, and reversibility. Potential negative or unwanted effects however include expulsion, perforation, malpositioning, pain and bleeding (Melles, 2007).

### ***2.3.3 Barrier methods***

Barrier methods prevent spermatozoa from coming into contact with the ovum. It comprises of male and female condoms and diaphragms and cervical cap usually used with spermicide. Advantages are: easy availability, protection against sexually transmitted diseases, cheap and safe (Melles, 2007). Vaginal film is a little two inch by two-inch thin sheet with a chemical that kills sperm (a chemical called nonoxynol-9). It is placed on or near the cervix (the opening of the womb). It dissolves in seconds (Clotney, 2012). The vaginal sponge is a barrier method of preventing pregnancy. The sponge acts as a barrier to prevent semen from entering the cervix. The sponge is more effective with women who have never given birth than with women who have ever given birth (Melles, 2007).

### ***2.3.4 Post-coital contraception***

Post-coital contraception is also called emergency contraception. Melles (2007) described three methods of emergency contraception, namely combined oral emergency contraceptives, progestogen-only emergency contraceptives, and insertion of a copper IUD. Melles (2007) concluded that insertion of a copper IUD before implantation is extremely effective when it is done up to 5 days after the first sexual intercourse (Melles, 2007). Other varieties like the vaginal ring, the contraceptive sponge and the transdermal patch is not available in Ghana.



### **2.3.5 Natural methods**

The natural methods of family planning are based on naturally observing occurring signs and symptoms of fertile and infertile phases of menstrual cycle with abstention from intercourse during the fertile phase. Major advantages of this method are the absence of physical side effects and freedom from dependence on medical personnel. The method requires some level of discipline and daily recordings. Natural methods include; observation of cervical mucus, observation of body temperature and calendar or rhythm method (Clottey, 2012)

### **2.4 Awareness and knowledge of modern contraceptives among adolescents**

Many studies have underlined the importance of knowledge of any modern form of contraceptives before their use can be expected. In a study carried out in Armenia for example, two major contributors to the use of contraceptives amongst adolescents were knowledge and availability (Sacci et al., 2008). A major factor associated with the non-use of modern contraceptives is lack of knowledge of modern contraceptives methods or unmet need for contraceptives. Most adolescent also do not use contraceptives due to lack of knowledge about its use or even the type of method to use (Kumar et al., 2007).

Acquiring knowledge about contraception is an important step towards gaining access to family planning services and adopting a suitable contraceptive method. The ability to recognise a family planning method when it is described is a simple test of a respondent's knowledge of the method but not necessarily an indication of the extent of his or her level of knowledge (GSS, 2014). Majority of demographic health surveys in sub-Saharan Africa show an increased trend in the knowledge of one or more methods of contraception. In Ghana for example, according to the Ghana Demographic and Health Survey (2014), the proportion of all women including adolescents who know any method of contraception has risen from 76% in 1988 to 98% in 2003 and 2008 and

to 99% in 2014 (GSS , 2014). The 2014 GDHS collected information on knowledge of contraception by asking respondents whether or not they have heard about eight modern methods (female and male sterilisation, intrauterine devices (IUDs), injectables, implants, the pill, male and female condoms, lactational amenorrhoea method (LAM), emergency contraception and two traditional methods (rhythm and withdrawal) (GSS,2014). Modern methods are more widely known than traditional methods; almost all women (99%) know of a modern method, compared with 85% who know of a traditional method. Among modern methods, the male condom (96%), injectables (92%), the pill (91%), and female condoms (87%) are the most commonly known modern methods among women. When compared with other modern methods, lactational amenorrhoea is known by a relatively small percentage of women (16%). Although about 7 in 10 women are aware of female sterilisation, just about one-third are aware of male sterilisation. Among traditional methods, rhythm (77%) and withdrawal (74%) are known by about three-quarters of all women. The extent of patterns in knowledge of modern and traditional methods of family planning among currently married and sexually active unmarried women are similar (GSS, 2014).

### **2.5 Modern contraceptive use among adolescents**

It has been estimated that two-thirds of all unintended pregnancies in developing countries occur among women and adolescents who do not use contraceptives (Mbizvo & Zaidi, 2010). A number of studies have highlighted the problem of low modern contraceptive usage among adolescents as well as the reasons why many adolescents do not use modern contraceptives. A study done in some developing countries revealed that the continuation of contraceptive use by adolescents is not assured, because most adolescents are not consistent in the use of contraceptives. The reasons given for that were fear of side effects, convenience of use, change of needs, and switch to other



methods. A Guttmacher report showed that majority of sexually experience teens (78% of females and 85% of males) in the United States used contraceptives during their first sexual intercourse. Adolescents who have sex at age 14 or younger are less likely to use contraceptive at first time of sex than older teen. Condom was seen to be the most commonly used contraceptive method for first intercourse: 68% of females and 80% males. Other methods used are pills, and long-acting methods like IUD and implants (Guttmacher, 2014). Most adolescents are mostly confused as to whether they have the legal right to use contraceptives and even if they have the right which type of contraceptive to use and where to get it from. They are also concerned about how to use contraceptives (Odu & Ayodele, 2007).

Contraceptive use among sexually active unmarried adolescents in Sub-Saharan Africa is generally low. This varies from 3% in Rwanda to a high of 56% in Burkina Faso (Hindin & Fatusi, 2009). About 23% of teens who use contraceptives use condoms. In Nigeria for instance, one study stated that 19% of adolescents in the middle of their schooling used condom and 77% thinks condoms are more reliable (Ojikutu & Adeleke, 2009). Another study in Nigeria found that adolescent who had early sexual debut are less likely to use contraceptive than older women, and that 77% of adolescents knew about some type of contraceptive but they did not use them (Ojikutu and Adeleke, 2009). A study in the Niger Delta of Nigeria also revealed that lack of resources reduces accessibility to contraceptive and reproductive advice in developing countries. The study further stressed that this situation has been exacerbated by religious beliefs that discourage the use of artificial birth control or family planning methods (Isa & Gani, 2012).

In Ghana, current use of any method of contraception is 23% among all women; 27% among currently married women; and 45% among sexually active unmarried women

(GSS, 2014). Among currently married women, 22% are using a modern method and 5% are using a traditional method (GSS, 2014). Contraceptive use varies with the woman's age. It is lowest among adolescent girls aged 15-19 (19%), mostly because they are in the early stages of family building. Injectables are the most widely used modern method among currently married women (8%), followed by the implants and the pill (5% each) (GSS, 2014).

Among sexually active unmarried women most of whom are young, the most common methods are the male condom and the pill (8% each), followed by injectables and rhythm (7% each), and implants (5%) (GDHS, 2014). Use of a traditional method is notably higher among sexually active unmarried women (13%) than women who are currently married (5%) (GSS, 2014). Literature also suggests that, in general, sexually active unmarried adolescents are not seeking to become pregnant and married adolescents may not wish to become pregnant at a young age or, if they have already had a child, wish to delay a second pregnancy (Cleland, Ali, & Shah, 2006). Despite this, contraceptive prevalence in Sub Saharan Africa has generally remained low at only 21%, with adolescent girls being the age group with the lowest contraceptive prevalence rate (Loaiza & Blake, 2010). In Ghana the reasons for non-use of contraceptives include fear of side effect and opposition to contraceptive use on religious grounds (GSS, 2008). Partner refusal and the fact that some adolescents feel they are not susceptible to pregnancy are some reasons why adolescents do not use contraceptives (Mbizvo & Zaidi, 2010).

## **2.6 Factors influencing non-use of modern contraceptives among adolescents**

Many studies in Sub-Sahara Africa show that there are many factors that inhibit the use of modern contraceptives among adolescents. These barriers include poor knowledge of contraceptive, fears and rumours about side effect, and unsupportive or negative

influences of partners and family members (Williamson et al, 2009). Family members put pressure on adolescents, especially female adolescents to give birth because they are not sure whether she would be fertile after using contraceptives. Others also reject contraceptives for religious reasons (Williamson et al, 2009). Contraceptive usage by adolescents has also been found to be influenced by socio-economic status, knowledge about contraceptives, attitudes about issues related to contraceptives, residential area, educational status, counseling received about contraceptives, attitudes of the contraceptive providers, and cultural values, beliefs and norms (Kanku and Mash, 2010). For instance, a study by Davies et al. (2006) found that contraceptive use has increased amongst adolescents in recent years. However, the study reported that consistent reliance on effective forms of contraception remained low. They also state that adolescent pregnancy appears to be encouraged by a lack of access to sex education. A study by Bankole (2007) on knowledge of correct condom use and consistency of use among adolescents in four countries in Sub-Saharan Africa also found that adolescents appear to be ignorant about issues such as puberty, pregnancy, child care and contraception. Ignorance, aggravated by cultural taboos about discussing sex with one's parents, combined with real or perceived peer group pressure to engage in sexual activities cause unnecessary health risk for many young women (Bankole et al, 2007).

Studies in the Philippines among adolescents also show poverty, lack of knowledge on contraceptives and having infrequent sex as reasons for contraceptive non-use (Gipson et al., 2011). They noted that the cut in contraceptive funding in the country is also a key reason (Gipson et al., 2011). The study indicated that meeting the unmet need for contraceptives would be very beneficial in reducing 4,700 maternal deaths, 1.6 million

fewer pregnancies, abortion would decline by 500,000, 200 miscarriages and 2,100 maternal mortality (Gipson et al., 2011).

In Sub-Saharan Africa, 20% to 30% of partners oppose contraceptives use, and do not encourage their adolescents to use contraceptives (Williamson et al, 2009). Religion has also been a barrier to contraceptive use for decades where children are regarded as gifts or blessings from God (Gipson et al., 2011). This is found mostly among the Catholics and Muslims who see contraceptive use as a license for illicit or extra marital sexual behaviour or indiscriminate sexual behavior (Gipson et al., 2011). Furthermore, societies that put high premium on the number of children as a source of security and safety of lineage and human power on farms would desire high numbers of children. This ideology prevents women and adolescent girls in such societies from using contraceptives to limit the number of children (Gipson et al., 2011). In societies where contraceptives are perceived as a means to eliminate a race or tribe, that community would not use contraceptives (Gipson et al., 2011).

In many African settings, studies have investigated the attitude of healthcare providers towards providing contraceptives for unmarried adolescents and reports reveal that many providers have negative attitudes. For instance, a Ugandan study reported that most of the providers had negative attitudes towards the provision of contraceptives for young people and were not prepared or were hesitant to give young people contraceptives (Ahanonu, 2013). As such, they imposed non-evidence based age restrictions and consent requirements (Ahanonu, 2013). In a South African study conducted among nurses, it was reported that the nurses generally stigmatised adolescent sex and felt very uncomfortable giving contraception to adolescent girls; they often tried to influence the adolescents who came for contraception not to have sex. Parental permission was also sought from adolescents before contraceptive

services were provided even though legally, parental permission is not needed for minors to be given contraception in South Africa (Williamson et al, 2009). Similarly, another study conducted among nurse-midwives' providing sexual and reproductive healthcare in Kenya and Zambia on their attitudes reported that majority approved of contraceptive use by sexually active girls and were prepared to counsel boys on condom use. However, most of the nurse-midwives in both countries reported that their first option would be to recommend unmarried adolescent boys and girls to abstain from sex when they ask for contraceptives rather than offer them contraceptives. Notably, those who had received continuing education on adolescent sexuality and reproduction showed a tendency towards more youth friendly attitudes. A Ghanaian study reported that providers enforced a variety of restrictions known to impede access to services. Restrictions include age and parity. A number of these providers believed that the injectable contraceptives cause permanent infertility (Mbizvo & Zaidi, 2010). A major reason reported to be responsible for the resistance of service providers to provide contraceptive services to adolescents is the belief that it promotes sexual promiscuity and that by restricting access to services, they were protecting both the client and the society (Ahanonu, 2013).

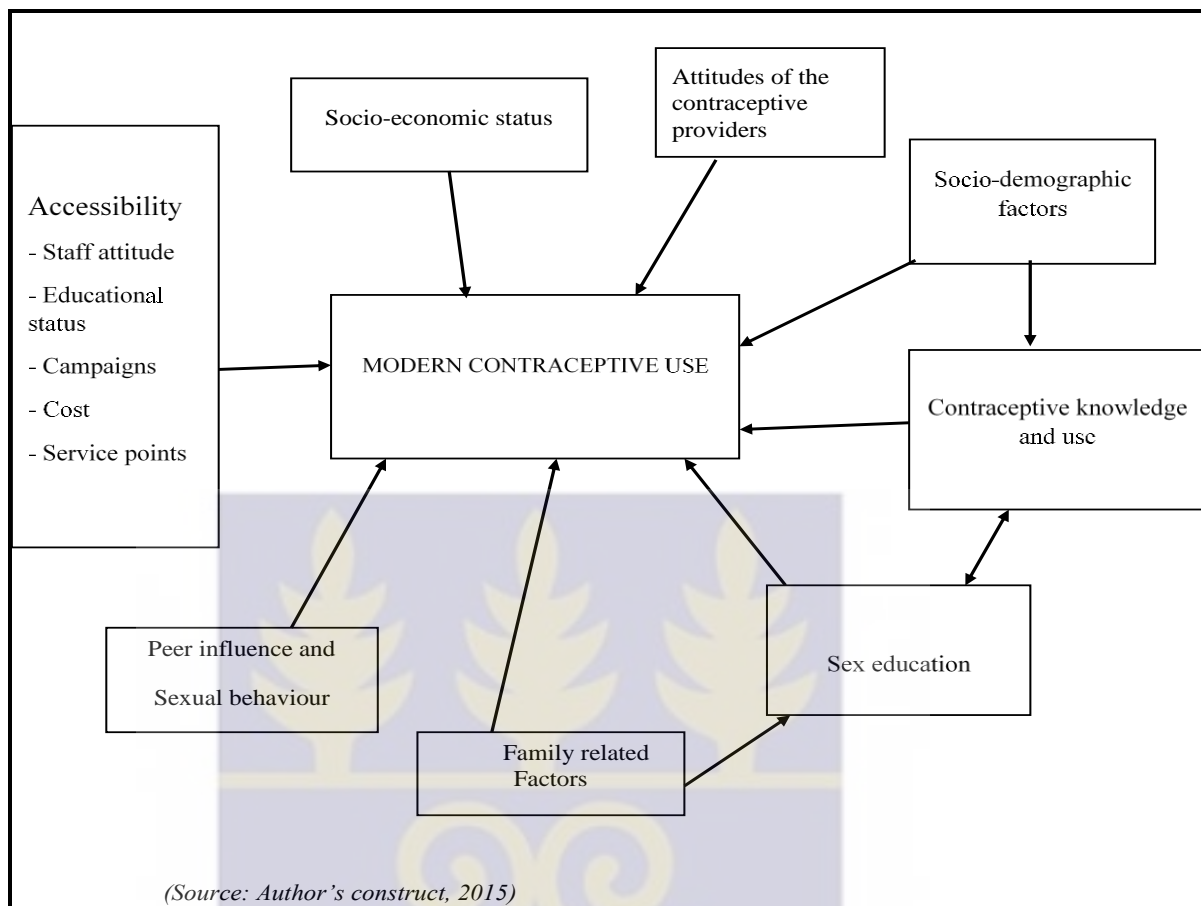
## **2.7 Conceptual Framework**

Previous studies in Sub-Saharan Africa show that there are many barriers that inhibit the use of modern contraceptives among adolescents: poor knowledge of contraceptives, fear and rumours about side effect, family related factors, religion, sex education, poor access to services, low socio-economic status, and lack of formal education (Williamson, et al, 2009). 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 it is a taboo for adolescents to talk about sexual issues let alone contraceptives (Yoder et al, 2011).

Figure 1 below represents the conceptual framework for this 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 campaign programmes, cost, and service point distribution are planned to promote the service. 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, family – related factors and socio-demographic factors including age, ethnicity and religion are all factors that contribute to non-use of modern contraceptives. Family level factors such as the economic status of parent or guardian, marital status of parents, existence of both parents and sisters who gave birth at early age have all been known to have influence on adolescent pregnancy or lack of use of modern contraceptive (GSS, 2014). In addition, socio economic status of adolescents could empower their decision-making and further suppress negative social perspective on contraceptives hence, increase its use. However, unemployment which leads to economic dependency may affect one’s decision making on birth control and therefore use or non-use of family planning methods.

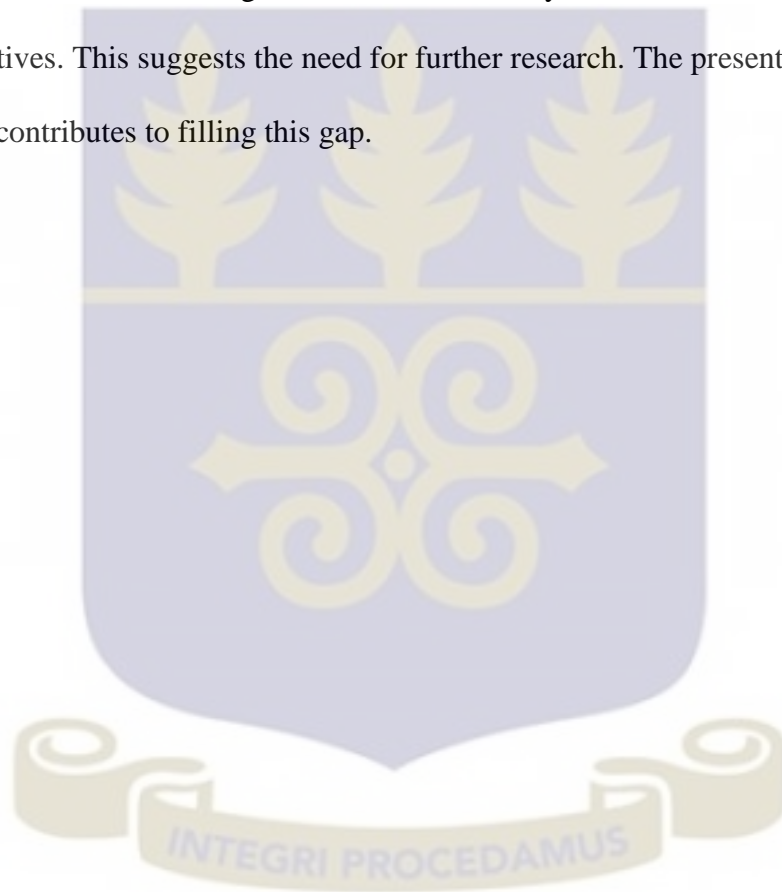


**Figure 1: Conceptual Framework showing factors influencing non-use of modern contraceptive among adolescents**

Acquiring knowledge about contraceptive methods is an important step towards gaining access to family planning services and adopting a suitable contraceptive method. Knowledge and use of contraceptive information, has a direct and indirect influence on contraceptive use. Directly, a more enlightened person on contraceptive may use it but the less enlightened, may doubt its potency and its benefit and therefore may not find it attractive to use. Indirectly, issues of social acceptability and accessibility may affect the use of family planning. In some instances, society may not accept contraceptives due to cultural, religious and economic reasons, coupled with poor provider attitude and cost of service. An enlightened adolescent on contraceptive usage and effects could suppress the hindrances in its non-use.

## 2.8 Conclusion

This chapter has reviewed relevant related literature on the factorings influencing non-use of modern contraceptive methods among adolescents. The review suggests that although there is the existence of literature on the factors influencing non-use of modern contraceptives among adolescents, most of these studies were carried out in the United States and other parts of Africa. Much has not been done in Ghana. Also most of the studies do not bring out the reasons why adolescent do not use modern contraceptives. This suggests the need for further research. The present study contribute therefore contributes to filling this gap.





## CHAPTER THREE

### METHODS

#### 3.1 Introduction

This chapter discusses the methods and techniques that were employed in this study. It describes the study area, research design, the variables, the study population, sample size, sampling method, data collection methods, quality control, data processing and analysis, and ethical considerations.

#### 3.2 Study design

The study employed a cross sectional survey design, using quantitative data collection and analysis methods. Cross-sectional studies provide a ‘snapshot’ of the outcome and the characteristics associated with it, at a specific point in time (Levin, 2006). Because this study aimed to identify the factors influencing non-use of modern contraceptives among adolescents, a cross-sectional study design was appropriate as the design enabled data to be collected on individual characteristics at the time of the study alongside information about the outcome, and association between individual characteristics and the outcome of interest.

#### 3.3 Study area

The study was conducted in the Sunyani Municipality of the Brong Ahafo Region of Ghana. Sunyani is located in the heart of the Brong Ahafo region (see figure 2). It is one of the 27 administrative districts of the region, and serves as the regional capital of the Brong Ahafo Region as well as the capital town of the Sunyani Municipality.



**Figure 2. Map of Sunyani Municipality**

According to the 2010 Population and Housing Census, the population of the Sunyani municipality is 123,224, made up of 61,610 males and 61,614 females (GSS, 2013). The municipality's population represents 5.3% of the region's total population. The population growth rate of the Municipality is estimated at 2.3% (GSS, 2013). The estimated adolescent population of the municipality is 27,109, and this constitutes 22.6% of the total population of Sunyani municipality (Sunyani Municipal Annual Report, 2014). There are about the same proportions of males and females in the Municipality. More males are however recorded for the population below 10 years. Similarly, more males are recorded for the age groups 20-24 and 25-29. More females are however recorded in the age groups 30 – 49, 65-69 and age groups 70 and above (GSS, 2014). The Total Fertility Rate for the municipality is 2.6 (Sunyani Municipal Annual Report, 2014). The Crude Birth Rate (CBR) in the municipality is 2.1 per 1000 population (GSS, 2013).

In relation to healthcare delivery, the municipality has a regional hospital, which caters for the inhabitants of the municipality and also serves as a referral point for the region. There is also a municipal hospital. There are three (3) health centres, one (1) mission hospital, two (2) private hospitals, three (3) Quasi clinics; Police Clinic, Prisons Clinic and thirteen (13) private Clinics, five (5) school clinics and three (3) maternity homes in the municipality. In all, there are thirty-four (34) health facilities in the municipality and out of these, eighteen (18) facilities provide antenatal and post-natal services for the community. Family planning services are provided in 21 out of the total of 34 health facilities in the municipality (Sunyani Municipal Annual Report, 2014).

### **3.4 Study Population**

The study's population comprised adolescents in the Sunyani Municipality. Although the WHO (2007) defines adolescents as persons between the ages of 10 -19 years, this study focuses on adolescents aged 14-19years because high incidence of teenage pregnancy in the Sunyani municipality has been found in this age group.

#### **3.4.1 Inclusion Criteria**

Adolescents who have celebrated their 14<sup>th</sup> birthday but not yet celebrated their 20<sup>th</sup> birthday and are currently residing within the Sunyani municipality were included in the study.

#### **3.4.2 Exclusion Criteria**

Adolescents who have not yet celebrated their 14<sup>th</sup> birthday and celebrated 20<sup>th</sup> birthday and who are not residing in the Sunyani Municipality were excluded. Adolescents who are married were also excluded.

### 3.5 Sample Size Determination

The estimated adolescent population in the Sunyani municipality is 27,109 (Sunyani Municipal Annual Report, 2014). Considering the largeness of the municipality's adolescent population size, a sample was drawn that would enable the study to make an inference about the adolescent population and as well help draw relevant conclusions. In order to determine an appropriate sample size for the study, Cochran (1977) formula was used. The formula is denoted as follows:

$$n = \frac{z^2 pq}{d^2}$$

Where;

z = the value for the given confidence interval

d = margin of error;

p = population proportion,

q = (1-p)

n = Base sample size required

In determining the sample size, a 95% confidence interval and a 5% margin of error was applied. A study population proportion (P) of 0.19 or 19% was chosen for modern contraceptive prevalence among adolescent 15-19 in Ghana. This figure is based on recent estimates from the Ghana Demographic and Health Survey (GSS, 2014). The sample size was thus calculated as follows:

$$n = \frac{1.96^2(0.19)(0.81)}{(0.05)^2}$$

Computing the above equation gave a sample size  $n = 236$

To account for non-response, a 10% upward adjustment was calculated, which equaled 24 respondents. The adjusted final sample size for the study was therefore = 260.

### **3.6 Sampling methods and procedures**

A multi-stage sampling design was used for the study. First, a simple random sampling technique was used to select four out of the six demarcated health sub-zones in the municipality. These four health sub-zones were Sunyani central, Abesim, Penkwasi and New dormaa. Second, houses were then sampled proportionate to the size of each health sub-zone to ensure fair distribution of the sample. This ensured that the largest (in terms of population and number of houses) in the health sub-zone had the largest sample size. Third, a systematic sampling technique was employed to select the required number of houses in each of the four health sub-zones. Every 5<sup>th</sup> house was selected in Sunyani Central, Penkwasi, New Dormaa and Abesim. In each of the four selected health sub-zones, one main health facility was chosen as the first house and the starting point of the count. Finally, and once the required number of houses were systematically selected, adolescents aged 14-19 were then sampled from each of the selected houses. Only one adolescent aged 14-19 was selected from each of the selected houses. Where the number of adolescents aged 14-19 in any of the selected houses were more than one, a list was made of all adolescents who were willing to take part in the study and a simple random sampling technique used to select only one adolescent. To do this, adolescents were made to randomly select pieces of folded paper that were



placed in a basket. One of the papers was labelled 'YES', and the rest 'NO'. The one who picked yes was included in the study. Where there was no adolescent aged 14-19 in any of the houses originally selected or where no adolescent aged 14-19 were willing to take part in the study, such houses were replaced with the next house.

### **3.7 Data Collection Methods and Tools**

Structured questionnaires were designed and used to collect data from adolescents aged 14-19 on the factors influencing non-use of modern contraceptive. The questionnaires were designed in the English language, but the questions were asked in both English and the local dialects (i.e. *Bonu* and *Twi*). This ensured better understanding for adolescents who had challenges with speaking the English language. Four Senior High school graduates were trained to help with the data collection. The training focused on rapport creation, assurance of privacy and confidentiality, the meaning of the items and correct ticking of responses provided. Attention were also given to skip patterns used in the questionnaire.

### **3.8 Pre-test of the study instrument**

Pre-testing of the questionnaires was carried out in the Sunyani West District. This is not the area of study but the adolescents there have similar characteristics as the adolescents in the study area. This enabled the researcher to clarify the accuracy of the questions, estimate the approximate time for each questionnaire and helped make the necessary corrections before the actual data collection.

### **3.9 Quality control and data management**

The whole process of data collection was standardised so that data obtained were uniform and of high quality. The research assistants were trained to make sure they knew the objectives and to ask questions and record responses appropriately. In

addition, the research assistants were regularly monitored during the data gathering stages. Errors detected during the data collection were discussed with research assistants and necessary corrections carried out with the respondents. Data collected were checked to ensure that information gathered was accurate. Questionnaires were checked for completeness before they were accepted. Questionnaires were numbered during data entry to ensure that they were not entered twice. Also, two data entry clerks were trained and monitored closely to enter the data into a computer software programme. Data were entered and edited by the two data entry persons to make sure data is correctly entered.

### **3.10 Data Analysis**

#### ***3.10.1 Variables***

Two main variables were considered in this study: outcome/dependent variable and independent variable

##### ***3.10.1.1 Outcome/dependent Variable***

The outcome variable for this study is Modern Contraceptive Use. By modern contraceptive use, reference is made to the use of the following methods: female sterilisation, male sterilisation, intrauterine device (IUD), implants, injectable, the pill, male condoms and female condoms, and lactational amenorrhoea method (LAM).

##### ***3.10.1.2 Independent Variables***

A number of independent variables were considered in the study. These include Age, Educational status, Socio-economic status, Knowledge about modern contraceptives, Attitudes towards non-use of modern contraceptives, Counseling received about contraceptives, Attitudes of the contraceptive providers, Ethnicity and Religion.

### **3.10.1.3 Analysis**

Descriptive statistics were used to describe the factors that influence non-use of modern contraceptives by summarising them into percentages, proportions and frequencies. Mean, median and standard deviation were calculated for age. Chi-square test was used to measure the association or relationship between the outcome variable (modern contraceptive use) and the explanatory variables. Regression analysis (logistic regression) was employed to assess the odds of the factors that influence non-use of modern contraceptives. Confidence level was held at 95%, and  $P < 0.05$  (at 5% level of significance) was considered significant. Data entry and processing were done using Epi info 7 and analysis were done using Stata version 13.1.

### **3.11 Ethical consideration**

Ethical clearance to conduct the study was obtained from the Ghana Health Service Ethical Review Committee (Protocol ID No. GHS-ERC: 04/12/2015). Written and verbal consent were also obtained from the Regional Director of Health Service (Brong Ahafo Region) and the Municipal Director of Health service.

Informed written consent were sought from all respondents. Informed consent were sought at different levels. Among adolescents who were below 18 years, consent were sought from their parents or guardians. All respondents in such cases were required to accent to their parents' consent.

Respondents were also assured of confidentiality and anonymity. The privacy of the respondents was ensured during the interview. Respondents were urged to participate at their own will without conditions attached (i.e. interviewees were briefed on the research and the indirect benefits of the research to them. They were then left to decide whether to participate in the research or not. Respondents were made aware that there



were no incentives and they could withdraw at any time during the study. Data collected were kept confidential, and accessible only to the researcher and his supervisor.



## CHAPTER FOUR

### RESULTS

#### 4.1 Introduction

This chapter presents the results of the study. It focuses on the socio-demographic characteristics of respondents, and awareness, knowledge and use of modern contraceptives among adolescents. The chapter particularly looks at the socio-demographic factors associated with modern contraceptive non-use and other factors that influence modern contraceptive non-use among adolescents.

#### 4.2 Socio-demographic characteristics of the respondents

Table 4.1 presents information on the socio-demographic characteristics of respondents. The study involved 260 adolescents aged 14-19 years, with a 100% response rate. The mean age of the respondents was 17.2 years ( $SD=\pm 1.39$ ) with majority (52.3%) aged 17-19 years. About 51% of the respondents were males. More than half of the respondents (55.8%) were in the JHS; 33.1% were in SHS; and only 1.9% had no formal education. Majority of the respondents (59.2%) were Christians while 40.8% were Muslims. As expected, almost all of the respondents (98.9%) were not married. However, 1.1% were co-habiting. Nearly half of the respondents (46.2%) resided in Sunyani central; 28.5% resided at New Dormaa; 18.9% resided at Abesim; and 6.45% resided at Penkwasi. In relation to the educational status of mothers and fathers of the respondents, 32.7% indicated that their mothers had no formal education; 25.0% reported that their mothers had completed JHS; 18.9% reported that their mothers had completed SHS; while 16.5% said that their mothers had attained tertiary education. Some 37.8% of respondents however indicated that their fathers had attained a tertiary education. In general, more fathers than mothers were reported as having attained some form of formal education (see table 4.1).

**Table 4.1: Socio-demographic characteristics of respondents (n = 260)**

<b>Characteristic</b>	<b>Frequency</b>	<b>Percent</b>
<b>Age</b>		
14-16	124	47.7
17-19	136	52.3
<b>Sex</b>		
Female	128	49.2
Male	132	50.8
<b>Educational level of respondent</b>		
None	5	1.9
Primary	14	5.4
JHS	145	55.8
SHS	86	33.1
Tertiary	10	3.9
<b>Religious Affiliation</b>		
Christianity	154	59.2
Islamic	106	40.8
<b>Marital Status</b>		
Not married	257	98.9
Co-habiting	3	1.1
<b>Residence</b>		
Abesim	49	18.9
Sunyani central	120	46.2
Penkwasi	17	6.5
New Dormaa	74	28.5
<b>Educational level of Mothers</b>		
None	85	32.7
Primary	18	6.9
JHS	65	25.0
SHS	49	18.9
Tertiary	43	16.5
<b>Educational level of Fathers</b>		
None	60	23.1
Primary	9	3.5
JHS	48	18.5
SHS	45	17.4
Tertiary	98	37.8
<b>Stay with</b>		
Parents	204	78.7
Guardian	47	18.1
Partner/friend	5	1.9
Myself/on my own	4	1.5
<b>Occupation of Fathers</b>		
Informal*	158	60.8
Formal*	102	39.2
<b>Occupation of Mothers</b>		
Informal*	217	83.5
Formal*	43	16.5
<b>Occupation of Other Guardian</b>		
Informal*	48	73.9
Formal*	17	26.2

\*informal - jobs that don't earn monthly salary; formal - jobs that earn monthly salary

With regard to the occupation of their parents, majority of the respondents indicated that their fathers (60.8%) and mother (83.5%) were engaged in informal jobs while

39.2% of fathers and 16.5% of mothers were engaged in formal jobs. Most of them (73.8%) said their guardians were involved in informal jobs while 26.2% said formal work. In relation to who the adolescents stayed with, 78.5% indicated they stayed with their parents, 18.1% with guardians and 1.9% stayed with their partners/friends while 1.5% stayed on their own.

### **4.3 Sexual Behaviour among Adolescents**

Before assessing contraception knowledge and use among adolescents, the study first looked at sexual behaviour among respondents. The results are shown in table 4. 2. A little over half of the respondents (50.4%) reported that they have had sex before, while 49.6% indicated otherwise. Among those who have had sex before, 46.6% had their first sex at ages ranging from 14-16 and about 57% of them did not use condom at their first sex. Furthermore, and as regards current sexual partner, 53.9% of the respondents reported that they did not currently have any sexual partner while 46.1% indicated they had sexual partners. However, more than half of the respondents (51.2%) reported to have had sexual partners ranging from 1-3 in their lifetime, while only 4.2% have had sexual partners ranging from 4-6 in their lifetime. Furthermore, in the last 12 months, 50.0% of the respondents said they have had 1-4 sexual partners while 50.0% indicated none. On having sexual intercourse while drunk, most of the respondents (88.1%) who have had sex before said they have never engaged in sex while drunk, while only 11.9% indicated they had engaged in such an act before.

**Table 4.2. Sexual Behaviour among Adolescents**

<b>Characteristic</b>	<b>Frequency</b>	<b>Percent</b>
<b>Ever had sex</b>		
Yes	131	50.4
No	129	49.6
<b>Age at first sex</b>		
8-10	3	2.3
11-13	20	15.3
14-16	61	46.6
17-19	47	35.8
<b>Have Sexual Partner</b>		
Yes	120	46.2
No	140	53.9
<b>Number sexual partners</b>		
None	116	44.6
1-3	133	51.2
4-6	11	4.2
<b>Number of sexual partners in the last 12 months</b>		
None	130	50.0
1-4	130	50.0
<b>Sexual intercourse while drunk</b>		
Yes	31	11.9
No	229	88.1
<b>Use of condom during drunk sex</b>		
Yes	11	35.5
No	20	64.5
<b>Pressure to have unprotected sex</b>		
Yes	109	41.9
No	151	58.1
<b>Pressure from whom</b>		
Friends	67	61.5
Relative	4	3.7
Partner	33	30.3
Teacher	1	0.9
Myself	4	3.7
<b>Thinks sex education influence modern contraceptive use</b>		
Yes	210	80.8
No	50	19.2
<b>Had sex education in school</b>		
Yes	194	74.6
No	56	21.5
Don't know	5	1.9
Not applicable	5	1.9
<b>Had sex education in house</b>		
Yes	125	48.1
No	132	50.8
Don't know	3	1.2

\* Sexual Partner- Penovaginal intercourse

Among those who had engaged in sex while drunk, 64.5% of them did not use condom while 35.5% indicated they used condom, and of the proportion who used condom, 72.7% reported that using condom was their idea. On being pressured to have unprotected sex, most of the respondents (58.1%) said they were not under any pressure

to have unprotected sex while 41.9% indicated they felt pressured to have unprotected sex. Among those being pressured to have unprotected sex, 61.5% indicated that they have received the pressure from friends, 30.3% indicated pressure from their partners and 3.7% indicated pressure from relatives, while 3.7% said they feel pressured by themselves to have unprotected sex. In relation to sex education, as many as 80.8% of the respondents believed that sex education can influence modern contraceptive use or non-use among adolescents while 19.2% of them indicated otherwise. Furthermore, about 75% of the respondents indicated that they had received sex education in school, while 50.8% said they did not receive sex education at home as against 48.1% who indicated that they had received sex education at home.

#### **4.4 Awareness and Knowledge of contraceptives**

Table 4.3 presents information on awareness, sources of information and knowledge of contraceptives among adolescents in the Sunyani Municipality. Majority of the respondents (95.4%) had heard about contraception, and 96.8% of them correctly indicated that contraception is any method or procedures used to prevent pregnancy. However, 1.6% indicated they didn't know what contraception meant. Those who had heard about contraception reported teachers (44.0%), radio (28.6%), friends (22.2%), and health workers (19.0%) as their main sources of modern contraceptive information (see Figure 3). Furthermore, 91.9% of those who have heard about contraceptives reported that they knew at least one modern contraceptive method. Male condom (84.2%), female condom (50.0%) and pills (54.8%) were the main modern contraceptive methods respondents identified. Other methods respondents identified were IUD (8.3%), Injectable (22.8%) and Implants (11.8%). Most of the respondents (88.7%) who were aware of modern contraceptive methods reported to know a place in

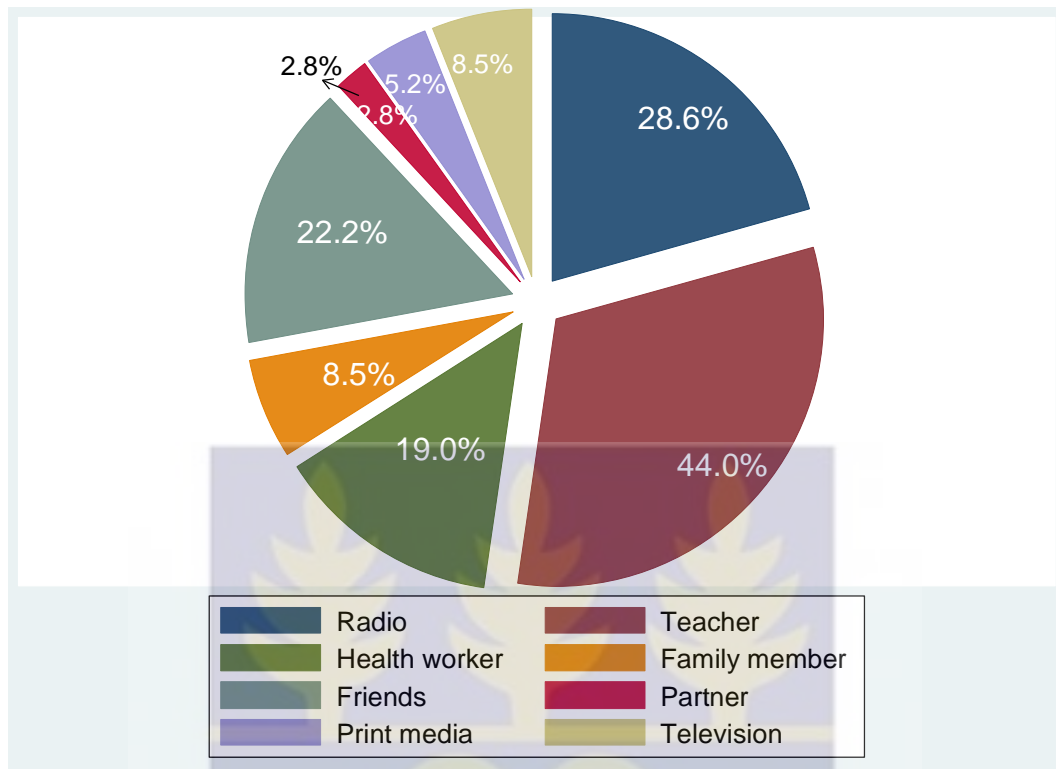


their community where they could get a modern contraceptive. These places included pharmacy/drug store (64.5%), hospital/clinic (18.2%) and healthcare providers (12.3%). Furthermore, majority of the respondents (71.4%) indicated that contraception is not a woman's business and that a man should be concerned about it. Interestingly, 47.2% of the respondents indicated that women who use contraception may become promiscuous (see table 4.3).

**Table 4.3. Awareness and Knowledge of contraceptives**

<b>Characteristic</b>	<b>Frequency</b>	<b>Percent</b>
<b>Heard about contraception</b>		
Yes	248	95.4
No	12	4.6
<b>Knows what contraception is</b>		
Yes	240	96.8
No	4	1.6
Don't Know	4	1.6
<b>Knows any modern contraceptive methods</b>		
Yes	228	91.9
No	20	8.1
<b>Knows specific modern contraceptive methods*</b>		
IUD	19	8.3
Injectable	52	22.8
Implants	27	11.8
Pills	125	54.8
Female condom	114	50.0
Male condom	192	84.2
Diaphragm	3	1.3
Lactational amenorrhea method	2	0.9
<b>Knows any place in the community to get modern contraceptive</b>		
Yes	220	88.7
No	28	11.3
<b>Knows specific place in the community to get modern contraceptive *</b>		
Hospital/clinic	40	18.2
Pharmacy/drug store	142	64.5
Health provider	27	12.3
Family Planning/PPAG Clinic	4	1.8
Friend	7	3.2
<b>Contraceptive is women's business</b>		
Yes	71	28.6
No	177	71.4
<b>Women using modern contraceptive may become promiscuous</b>		
Yes	117	47.2
No	119	47.9

\*multiple responses given



**Figure 3. Source of information of modern contraceptives**

#### **4.5 Modern Contraceptive use among Adolescents**

One of the specific objectives of this research was to determine modern contraceptive use among adolescents in the Sunyani Municipality. Table 4.4 shows modern contraceptive use among adolescents. More than half of the respondents (61.8%) indicated that they have never used any contraceptive before while 38.2% reported ever using a contraceptive before. Among adolescents who have used a contraceptive before, contraceptive methods ever used were male condom (73.8%), pills (19.4%), female condom (8.7%) and injectable (6.8%) while contraceptive methods they were currently using included male condom (61.2%), pills (13.6%), female condom (7.8%) and injectable (5.8%). However, 18.4% of them indicated that they were currently not using any contraceptive method.

**Table 4.4. Modern Contraceptive use among Adolescents**

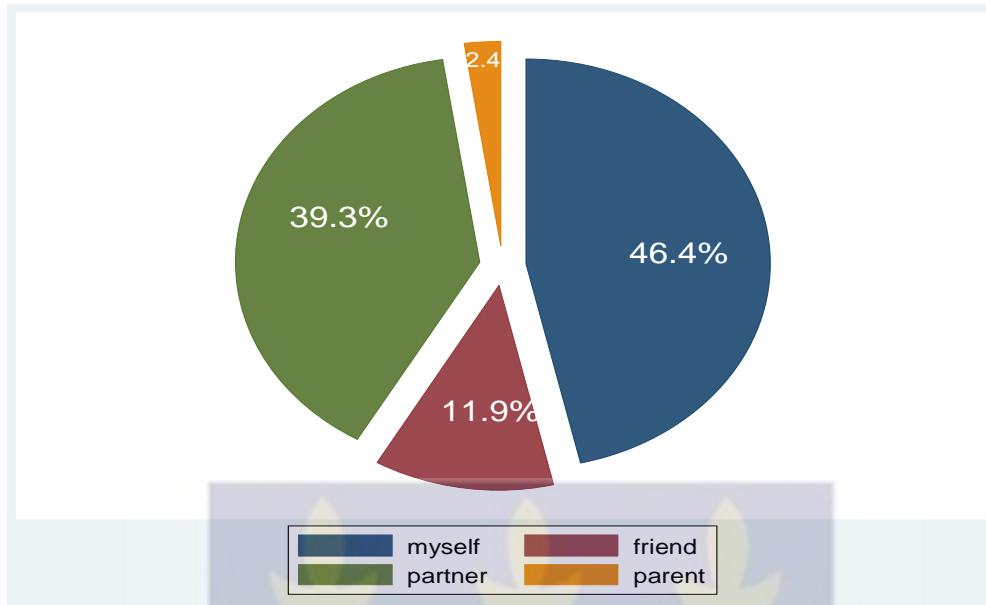
<b>Statements</b>	<b>Frequency</b>	<b>Percent</b>
<b>Use of condom at first sex</b>		
Yes	56	42.8
No	75	57.3
<b>Use any modern contraceptive before</b>		
Yes	50	38.2
No	81	61.8
<b>Methods ever used*</b>		
Injectables	7	6.8
Pills	20	19.4
Female condom	9	8.7
Male condom	76	73.8
<b>Current methods used*</b>		
Injectable	6	5.8
Pills	14	13.6
Female condom	8	7.8
Male condom	63	61.2
None	19	18.4
<b>Specific place to get modern contraceptives in the municipality*</b>		
Hospital/clinic	18	17.5
Pharmacy/drug store	87	84.5
Health provider	12	11.7
Family planning/PPAG Clinic	3	2.9
Others places	2	1.9
<b>Period of contraceptive use</b>		
One month and over	38	36.9
One to two years	47	45.6
Three to five years	18	17.5
<b>Frequency of contraceptive use</b>		
Every time	30	29.2
Once a while	73	70.9
<b>Who should use contraceptives</b>		
Married couples only	35	13.5
All sexually active persons	152	58.5
Adults only	65	25.0
Those not married	8	3.1
<b>Use of contraceptive at last sex</b>		
Yes	84	32.3
No	47	18.1
Not applicable	129	49.6
<b>Method used at last sex</b>		
Condom	73	86.9
Injectable	1	1.2
Pills	10	11.9
<b>Ability to get modern contraceptive by self</b>		
Yes	76	90.5
No	8	9.5
<b>Type of methods obtainable by self *</b>		
IUD	1	1.3
Injectable	7	9.2
Implants	1	1.3
Pills	20	26.3
Female condom	15	19.7
Male condom	53	69.7

\*multiple responses given

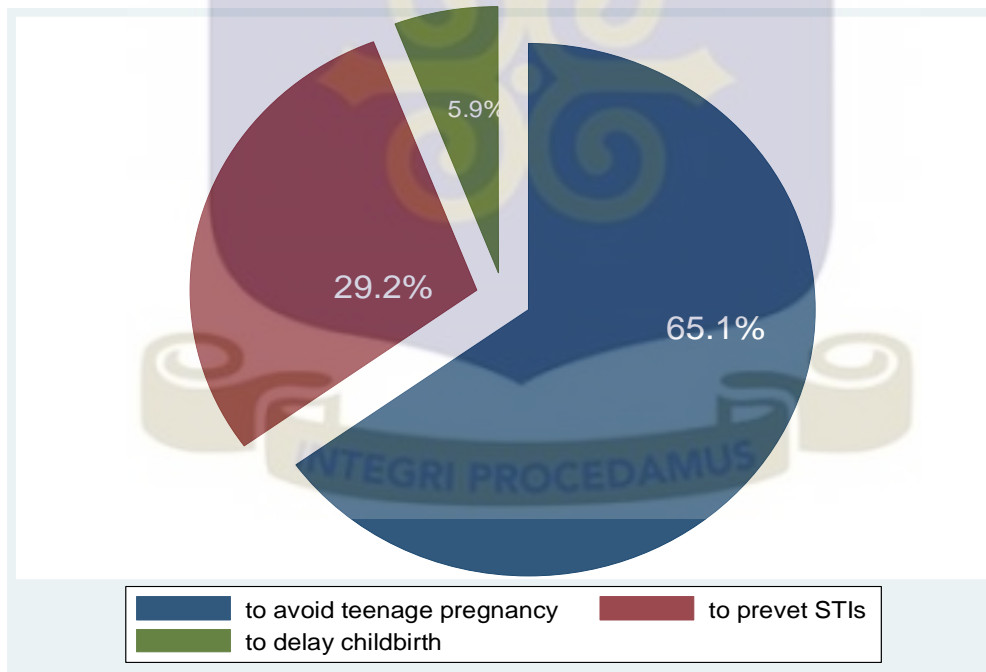
As regards specific places where they obtained these contraceptives, pharmacy/drug stores (84.5%), Hospital/clinic (17.5%), healthcare provider (11.7%) and Family planning/PPAG Clinic (2.9%) were the main sources. Also, 45.6% of the respondents who have ever used modern contraceptives said they had used them over a period of one to two years; 36.9% said one month and over; and 17.5% indicated three to five years. On how often they use contraceptives, 70.9% reported they used contraceptives once a while, with only 29.1% indicating they use contraceptive every time they have sex.

On the question of who adolescents think should use contraceptives, majority of the respondents (58.5%) said all sexually active persons; 25.0% said adults only; 13.5% said married couples only; and 3.1% said those not married. About 32% of the respondents reported that they used a contraceptive during their last sexual intercourse. Of these, majority (86.9%) used condom while 11.9% indicated they used pills. Among those who used contraceptives at their last sex, 90.5% indicated that they could get any modern contraceptive if they wanted and the methods they would prefer were male condom (69.7%), female condom (19.7%), injectable (9.5%) and IUD and implant (1.3%).

Figure 4 below also shows the decision maker the last time modern contraceptive was used. Some 46.4% of the respondents indicated they took the decision by themselves; 39.3% said their partner; 11.9% indicated their friends; while only 2.4% said their parents. With regard to their reasons for using contraceptives, figure 4 below shows that 65.1% of the respondents who have ever used a contraceptive indicated they did so to avoid teenage pregnancy; 29.1% did so to prevent STI's; and 5.8% said they did so to delay childbirth.



**Figure 4. Decision maker last time modern contraceptive was used**



**Figure 5. Reasons for using contraceptives**

#### 4.6 Perceived reasons why adolescents do not use modern contraceptives

##### (Respondents own perception)

The main objective of this study was to determine the factors influencing non-use of modern contraceptives in the Sunyani Municipality. In order to achieve this objective, the study first looked at factors that respondents perceived to be influencing non-use of modern contraceptives among adolescents. Poor attitude of contraceptive service providers (48.5%), lack of knowledge of contraceptive methods (47.3%), fear of side effects of contraceptives use (45.8%), high cost of modern contraceptives (39.6%) and religious prohibitions and beliefs (36.5%) were the main reasons why adolescents in the Sunyani Municipality were not using modern contraceptive. Other reasons included long distance to contraceptive services (28.8%), no or poor counselling received about contraceptive (25.0%), partner or family members opposed to use of modern contraceptives (20.4%), infrequent sex (17.3%), cultural or traditional beliefs (12.7%) and difficulties associated with getting preferred contraceptive methods (11.9%). The results are presented in table 4.5.

**Table 4.5. Reasons why adolescents do not use modern contraceptives**

Reason*	Frequency	Percent
Religious prohibitions and beliefs	95	36.5
Long distance to contraceptive services	75	28.8
Poor attitude of contraceptive providers	126	48.5
Partner or family members opposed to use	53	20.4
Fear of side effect	119	45.8
Lack of knowledge of contraceptive methods	123	47.3
Infrequent sex	45	17.3
Hard to get preferred methods	31	11.9
Too costly	103	39.6
No or poor counselling received about contraceptive	65	25.0
Cultural or traditional beliefs	33	12.7

\*Multiple responses given



#### **4.7 Socio-demographic factors associated with non-use of modern contraceptive**

To determine the factors influencing non-use of modern contraceptives in the Sunyani Municipality, the study first looked at socio-demographic factors that were associated with non-use of modern contraceptives. In this regard, a bivariate analysis was conducted to examine the association between various socio-demographic variables and non-use of modern contraceptives among adolescents. The results are shown in table 4.6. Age of respondent was significantly associated with non-use of modern contraceptives ( $p < 0.001$ ). A significant proportion of the respondents (72.6%) aged 14-16 did not use contraceptive as compared to 49.3% of those aged 17-19. Educational status of the respondents was also found to be related to non-use of modern contraceptives ( $p < 0.001$ ). Thus increasing educational attainment tended to be associated with more modern contraceptive use. Furthermore, the level of education attained by the respondents' mothers was also associated with non-use of modern contraceptives ( $p < 0.028$ ). There were significant differences between the number of respondents whose mothers had no education (63.5%), JHS education (67.7%) and Tertiary education (67.4%) who did not use contraceptives as compared to mothers with no education (36.5%), JHS education (32.3%) and Tertiary education (32.6%) whose adolescents used contraceptives. Majority of the respondents who reported to be staying with their parents (62.7%) and guardian (61.7%), were not using contraceptives as compared to those who stayed with their parents (37.3%) and guardian (38.3%) and used contraceptives ( $p < 0.003$ ). However, no associations were found between sex, religion, place of residence, educational status of fathers, occupations of both mothers and fathers, and non-use of modern contraceptives (see table 4.6).

**Table 4.6. Socio-demographic factors associated with non-use of contraceptives**

Variable	Contraceptive use, n (%)		Chi-square P-value
	Yes	No	
<b>Age</b>			
14-16	34(27.4)	90(72.6)	0.001*
17-19	69(50.7)	67(49.3)	
<b>Sex</b>			
Female	54(42.2)	74(57.8)	0.404
Male	49(37.1)	83(62.9)	
<b>Educational status</b>			
None	2(40.0)	3(60.0)	0.001*
Primary	6(42.9)	8(57.1)	
JHS	42(29.0)	103(71.0)	
SHS	45(52.3)	41(47.7)	
Tertiary	8(80.0)	2(20.0)	
<b>Religion</b>			
Christianity	66(42.9)	88(57.1)	0.198
Islamic	37(34.9)	69(65.1)	
<b>Place of residence</b>			
New Dormaa	31(41.9)	43(58.1)	0.370
Abesim	23(46.9)	26(53.1)	
Penkwasi	8(47.1)	9(52.9)	
Sunyani central	41(34.2)	79(65.8)	
<b>Educational status of mother</b>			
None	31(36.5)	54(63.5)	0.028*
Primary	12(66.7)	6(33.3)	
JHS	21(32.3)	44(67.7)	
SHS	25(51.0)	24(49.0)	
Tertiary	14(32.6)	29(67.4)	
<b>Educational status of father</b>			
None	23(38.3)	37(61.7)	0.913
Primary	3(33.3)	6(66.7)	
JHS	17(35.4)	31(64.6)	
SHS	18(40.0)	27(60.0)	
Tertiary	42(42.9)	56(57.1)	
<b>Stay with</b>			
Parents	76(37.3)	128(62.7)	0.003*
Guardian	18(38.3)	29(61.7)	
Partner	5(100.0)	0(0.0)	
By myself	4(100.0)	0(0.0)	
<b>Occupation of father</b>			
Informal worker	59(37.3)	99(62.7)	0.351
Formal worker	44(43.1)	58(56.9)	
<b>Occupational of mother</b>			
Informal worker	88(40.6)	129(59.4)	0.487
Formal worker	15(34.9)	28(65.1)	

\*p&lt;0.05

#### 4.8 Other factors that influence contraceptive non-use

In addition to socio-demographic factors, the study also investigated associations between other factors and non-use of modern contraceptives among adolescents using bivariate analysis. The results are shown in table 4.7. The bivariate analysis shows that there was a significant relationship between having a sexual partner and contraceptive non-use. Most of the adolescents who did not have sexual partners (87.1%) had never used any contraceptive as compared to those who had no sexual partners (12.9%) and had used contraceptives, whilst most of the respondents who had sexual partners (70.8%) had used contraceptives as against 29.2% who had sexual partners and had never used any contraceptive ( $p < 0.001$ ). The number of sexual partners an adolescent had was furthermore found to be significantly related to contraceptive non-use ( $p < 0.001$ ). Almost all of the respondents who had no sexual partners in their lifetime (99.1%) had never used any contraceptive. However, most of the respondents who have had 1-3 (69.9%) and 4-6 (81.8%) sexual partners in their lifetime used contraceptives. Additionally, the number of sexual partners an adolescent had had in the last 12 months was also found to be related to contraceptive non-use ( $p < 0.001$ ). The majority of adolescents (93.8%) who had no sexual partners in the last 12 months had never used any contraceptive. Knowing a place in the community where modern contraceptives could be obtained had a relationship with contraceptive non-use ( $p < 0.034$ ). There was a significant number of adolescents (53.8%) who said they knew a place in the community where they could get a contraceptive, who had never used any contraceptive as against 46.2% of them who had used a contraceptive before. However, more than half of the respondents (75.0%) who did not know a place in the community where they could get contraceptive had never used a contraceptive compared to 25.0% of them who indicated they have used contraceptive before.

**Table 4.7. Other factors that influence non-use of modern contraceptives**

Factor	Contraceptive use, n (%)		Chi-square P-value
	Yes	No	
<b>Have a sexual partner</b>			
Yes	85(70.8)	35(29.2)	0.001*
No	18(12.9)	122(87.1)	
<b>Age at first sex</b>			
8-10	3(100.0)	0( 0.0 )	0.110
11-13	15(75.0)	5(25.0)	
14-16	42(68.9)	19( 31.1)	
17-19	41(87.2)	6(12.8)	
<b>Number of sexual partners</b>			
None	1(0.9)	115(99.1)	0.001*
1-3	93(69.9)	40(30.1)	
4-6	9(81.8)	2(18.2)	
<b>Number of sexual partners in the last 12 months</b>			
None	8(6.2)	122(93.8)	0.001*
1-4	95(73.1)	35(26.9)	
<b>Heard of any contraceptive method</b>			
Yes	100(43.9)	128(56.1)	0.001*
No	3(15.0 )	17(85.0 )	
<b>Knows of a place in the community to get contraceptive</b>			
Yes	92(46.2)	107(53.8)	0.034*
No	7(25.0)	21(75.0)	
<b>Thinks that one unprotected sex can result in pregnancy</b>			
Yes	83(42.1)	114(57.9)	0.046*
No	17(40.5)	25(59.5)	
Don't know	3(14.3)	18(85.7)	
<b>Thinks that modern contraceptive can offer 100% protection from pregnancy</b>			
Yes	56(42.4)	76(57.6)	0.549
No	38(38.0)	62(62.0)	
Don't know	9(32.1)	19(67.9)	
<b>Thinks that contraceptive is women's business</b>			
Yes	33(46.5)	38(53.5)	0.165
No	70(37.0)	119(63.0)	
<b>Thinks that women using modern contraceptive may become promiscuous</b>			
Yes	57(40.4)	84(59.6)	0.771
No	46(38.7)	73(61.3)	
<b>Have sexual intercourse while drunk</b>			
Yes	26(83.9)	5(16.1)	0.001*
No	77(33.6)	152(66.4)	
<b>Pressured to have unprotected sex</b>			
Yes	57(52.3)	52(47.7)	0.001*
No	46(30.5)	105(69.5)	
<b>Received sex education in school</b>			
Yes	76(39.2)	118(60.8)	0.274
No	25(44.6)	31(55.4)	
Don't know	0(0.0)	5(100.0)	
Not applicable	2(40.0)	3(60.0)	
<b>Received sex education at home</b>			
Yes	45(36.0)	80(64.0)	0.488
No	57(43.2)	75(56.8)	
Don't know	1(33.3)	2(66.7)	

\*p&lt;0.05

Majority of the respondents (57.9%) who indicated that engaging in just one unprotected sex could not make a girl pregnant had never used a contraceptive while 42.1% of them had used a contraceptive before ( $p<0.04$ ). More than half of adolescents who indicated they had not engaged in sexual intercourse while drunk (66.4%) reported to have never used any contraceptive as compared 33.6% of them who had used contraceptive before ( $p<0.001$ ).

Being pressured to have unprotected sex was also found to be related to contraceptive non-use. Most of the respondents (69.5%) who indicated not to be under any pressure to have unprotected sex had never used any contraceptive as compared to 30.5% of them who had used contraceptive before ( $p<0.001$ ). However, age at first sex, thought that modern contraceptive use can offer 100% protection from pregnancy, thought that contraceptive is a women's business, thought that women using modern contraceptive may become promiscuous, and having receive sex education in school and at home were found not to be associated with non-use of modern contraceptives.

#### **4.9 Logistic regression of factors that influence non-use of modern contraceptive**

From the bivariate analysis of socio-demographic as well as other factors, a total of 11 factors were found to be associated with non-use of modern contraceptives. To further investigate the strength of these associations, a simple logistic regression analysis was performed on the 11 variables. The results are shown in table 4.8. Adolescents who are aged 17-19 were at a reduced odd of not using contraceptives when compared to those aged 14-16 (OR=0.37; 95% CI=0.22-0.62).



**Table 4.8. Logistic regression of factors influencing modern contraceptives non-use**

Factors	Crude OR(95% CI)	P-value	Adjusted OR(95% CI)	P-value
<b>Age<sup>¥</sup></b>				
14-16( <i>ref</i> )	1		1	
17-19	0.37(0.22-0.62)*	0.001	0.52(0.28-0.99)* <sup>¥</sup>	0.046
<b>Educational status<sup>¥</sup></b>				
None ( <i>ref</i> )	1		1	
Primary	0.89(0.11-7.11)	0.912	0.28(0.02-4.13)	0.351
JHS	1.63(0.26-10.14)	0.597	0.39(0.03-4.78)	0.464
SHS	0.61(0.10-3.82)	0.595	0.21(0.02-2.61)	0.222
Tertiary	0.17(0.02-1.78)	0.138	0.06(0.00-1.22) <sup>¥</sup>	0.067
<b>Educational status of mothers<sup>¥</sup></b>				
None ( <i>ref</i> )	1		1	
Primary	0.29(0.10-0.84)*	0.023	0.19(0.06-0.64)	0.007
JHS	1.20(0.61-2.38)	0.596	0.97(0.46-2.06)	0.942
SHS	0.55(0.27-1.12)	0.102	0.61(0.28-1.32)	0.212
Tertiary	1.19(0.55-2.58)	0.662	1.05(0.43-2.56) <sup>¥</sup>	0.906
<b>Stay with<sup>¥</sup></b>				
Parents ( <i>ref</i> )	1		1	
Guardian	0.96(0.50-1.83)	0.894	0.76(0.37-1.58) <sup>¥</sup>	0.464
<b>Have a sexual partner<sup>¥¥</sup></b>				
Yes ( <i>ref</i> )	1		1	
No	16.46(8.75-30.98)*	0.001	1.19(0.39-3.58) <sup>¥¥</sup>	0.458
<b>Number of sexual partners<sup>¥¥</sup></b>				
None ( <i>ref</i> )	1		1	
1-3	0.003(0.00-0.03)*	0.001	0.10(0.10-1.52)	0.107
4-6	0.003(0.00-0.02)*	0.001	0.09(0.00-2.33) <sup>¥¥</sup>	0.114
<b>Number of sexual partners in the last 12 months<sup>¥¥</sup></b>				
None ( <i>ref</i> )	1		1	
1-4	0.02(0.01-0.05)*	0.001	1.06(0.23-4.91) <sup>¥¥</sup>	0.958
<b>Know of a place in the community to get contraceptive<sup>¥¥¥</sup></b>				
Yes ( <i>ref</i> )	1		1	
No	2.58(1.05-6.34)*	0.039	1.96(0.72-5.50)	0.199
<b>Thinks that unprotected sex can result in pregnancy<sup>¥¥¥</sup></b>				
Yes ( <i>ref</i> )	1		1	
No	1.07(0.54-2.10)	0.843	0.61(0.26-1.48)	0.275
Don't know	4.37(1.25-15.32)*	0.021	4.26(0.84-21.67)	0.080
<b>Have sexual intercourse while drunk</b>				
Yes ( <i>ref</i> )	1		1	
No	10.26(3.79-27.78)*	0.001	1.55(0.52-4.65) <sup>¥¥</sup>	0.398
<b>Pressure to have unprotected sex<sup>¥¥¥¥</sup></b>				
Yes ( <i>ref</i> )	1		1	
No	2.50(1.50-4.17)*	0.001	1.73(0.92-3.28) <sup>¥¥¥¥</sup>	0.112

¥ adjusted for age, educational status, mother's education, and who adolescents stay with; ¥¥ adjusted for age and who adolescents stay with; ¥¥¥ adjusted for age, mother's education, educational level and know place to get contraceptive; ¥¥¥¥ adjusted for age, have sexual partner and who adolescents stay with; ¥¥¥¥¥ adjusted for age, educational level and mother's education; **OR**=odds ratio; **CI**=confidence interval; *ref*=reference category; \*p<0.05



When compared to adolescents whose mothers had no education, adolescents whose mothers had primary education had reduced odds of not using modern contraceptives (OR=0.29; 95% CI=0.10-0.84). Having a sexual partner, number of sexual partners adolescent had had in their lifetime, and the number of sexual partners in the last 12 months were all found to be associated with contraceptive non-use. Adolescents who did not currently have a sexual partner had an increased odd of not using contraceptive as against those who had sexual partners (OR=16.46; 95% CI=8.75-30.98). Additionally, adolescents who had had 1-4 sexual partners in the last 12 months were at a decreased odd of using contraceptives when compared to those who had no sexual partner in the last 12 months (OR=0.02; 95% CI=0.01-0.05). The odds of contraceptive non-use was 2.58 times higher among adolescents who do not know a place to get contraceptive in the community (OR=2.58; 95%CI=1.05-6.34) compared to adolescents who knew a place to get contraceptive in the community. Furthermore, adolescents who indicated they did not know that one unprotected sex can result in pregnancy had 4.37 higher odds of not using contraceptives compared to adolescents who believed one unprotected sex can result in pregnancy (OR=4.37; 95%CI=1.25-15.32). Among adolescents who have not had sexual intercourse while drunk (OR=10.26; 95%CI=3.79-27.78) and those who had not been pressured to have unprotected sex (OR=2.50; 95%CI=1.50-4.17), there were, respectively, 10.26 and 2.50 higher odds of contraceptive non-use compared to adolescents who had had sexual intercourse while drunk and those who had been pressured to have unprotected sex.

## CHAPTER FIVE

### DISCUSSION

#### 5.1 Introduction

This chapter discusses the results presented in the previous chapter. The discussion comprises a summary of the findings, and comparison of the findings from the study with existing studies done elsewhere. The chapter also deals with the implications of the finding with respect to policy and practice, as well as the strengths and limitations of the study.

#### 5.2 Summary of Findings

The purpose of this study was to examine the factors influencing non-use of modern contraceptives among adolescents in the Sunyani municipality. Findings suggested that while awareness and knowledge of contraceptives was generally high (95.4%), contraceptive prevalence was still very low (38.2%). Those who had heard about contraception reported teachers (44.0%), radio (28.6%), friends (22.2%) and health workers (19.0%) as their main source of information. The common types of contraceptives used were condoms (82.5%), pills 19.4% and injectables 6.8%.

Findings also showed that a little over half of the respondents (50.4%) reported that they have had sex before, while 49.6% indicated otherwise. Among those who have had sex before, 46.6% had their first sex at ages ranging from 14-16. More than half of the sexually active adolescents (61.8%) indicated that they have never used any contraceptive before while 38.2% reported ever using a contraceptive. In addition, reasons for not using modern contraceptives included long distance to contraceptive services, lack of knowledge of contraceptive methods, partner or family members opposed to use of modern contraceptives, infrequent sex, cultural or traditional beliefs and difficulties associated with getting preferred contraceptive methods. Adolescents' non-

use of contraceptives in the study was significantly associated with several factors, including age of the respondents, and mothers' educational status.

### **5.3 Consistency with Previous Research**

A number of the findings from this study are similar to findings from previous studies. For instance, age of respondent was significantly associated with non-use of modern contraceptives. A significant proportion of the respondents (72%) aged 14-16 did not use contraceptive as compared to 49% of those aged 17-19. Adolescents who are aged 17-19 were at a reduced odd of not using contraceptives when compared to those aged 14-16 (OR=0.37; 95% CI=0.22-0.62). This is consistent with Nyarko (2015) who found that older adolescents were more than three times likely to practice contraceptive use than younger adolescents. Educational status of the respondents was also found to be related to non-use of contraceptives. Thus, educated adolescents were more likely to use contraceptives than their uneducated counterparts. This is also consistent with Khan et al. (2012) who found a low contraceptive use among uneducated female adolescents in Bangladesh. A total of 95% had heard about contraceptives and 96.8% of them correctly indicated that contraception is any method or procedures used to prevent pregnancy with the male condom 84% and pills 55% being the most widely known methods. This result is in line with what is reported in the Ghana Demographic and Health Survey 2014, where knowledge of at least one method is nearly universal in Ghana, with 99% of women and men having this knowledge on modern contraceptive, regardless of their marital status (GDHS, 2014). The result is also consistent with a study by Awusabo-Asare et al. (2006) which reported that about 90% of adolescents between the ages of 12 and 19 years have knowledge on at least one modern method of contraceptive.

Notwithstanding the high rate of contraceptive knowledge among the respondents, this current study found as high as 61.8% of adolescents who reported never to have used any form of contraceptives. This is very consistent with a recent report which placed Ghana among the nations with lowest usage of contraceptives in women between the ages of 15 and 19 years (GSS, 2010). The study also found that about 57% of the respondents who were sexually active did not use any form of contraceptive during their first sexual intercourse. This finding is consistent with the Southward teenage pregnancy and parenthood strategy report (2001-2010) which indicated that most sexually active adolescents do not use any form of contraceptive during their first sexual experience and a report by Tripp & Viner (2005) that shows that most adolescents do not use any contraceptives during their first sex. The findings however contradict a Guttmacher Institute report in 2014 that showed that 78% of female and 85% of male adolescents in the USA use contraceptives during their first sexual experience.

#### **5.4 Explanation of Findings and Implications**

It is often believed that knowledge on contraceptives would translate into use. In this study, 95% of the respondents have heard about contraceptives and 96.8% of them correctly indicated that contraception is any method or procedures used to prevent pregnancy with male condom (84%) and pills (54%) being the most widely known methods. The high level of knowledge on contraceptives could be attributed to the successful dissemination of family planning messages, mainly by teachers and through the mass media (GDHS, 2014). Knowledge of condom is not surprising in the wake of its promotion as a dual protection method against pregnancy and HIV and AIDS. Ongoing radio and television campaigns messages such as 'it's your life, it's your choice' often emphasize on these methods. However low contraceptive use was

reported among study participants who were sexually active: more than half of the respondents (61.8%) indicated that they have never used any contraceptive before while 38.2% reported ever using a contraceptive before. This finding reechoes the fact that awareness and knowledge of contraceptive methods do not mean they would be used. This is indeed one of the conclusions Ojikuto and Adeleke (2009) drew in their study among adolescents in Nigeria

In this study also, adolescents who were aged 17-19 were at a reduced odd of not using contraceptives when compare to those aged 14-16. Older adolescents were more likely to practice contraceptive use than younger adolescents. Perhaps, this is because older adolescents are more mature and enlightened in terms of available contraceptive types and the importance of contraceptive use, compared to younger adolescents who may be comparatively naive in terms of contraception (GDHS, 2014). Besides, older adolescents are more likely to be working and may have obtained more education and more likely to be sexually active than their younger counterparts. Educational status of the respondents was also found to be related to the non-use of contraceptives. Thus increasing educational attainment tended to be associated with more modern contraceptive use. The likelihood of contraceptive use among adolescents increased significantly with increase in level of education. Thus, educated adolescents were more likely to use contraceptives than their uneducated counterparts. This may result from the fact that educated adolescents are more likely to be abreast of available contraceptives and are more likely to appreciate the positive impacts contraceptives have on their lives.



The study further found that mothers' educational status was also associated with non-use of modern contraceptive. There were significant differences between respondents whose mothers had no education and who did not use contraceptives as compared to mothers with no education and whose adolescents used contraceptives. This may result from the fact that educated women are more likely to be abreast of available contraceptives and are more likely to appreciate the positive impacts contraceptives have on their lives, and therefore encourage their sexually active children/adolescents to use modern contraceptives.

Findings from this study further revealed that the main sources of knowledge about the methods of contraceptives were teachers (44%), radio (28%), friends (22%) and health workers (19%). These results suggest that teachers, radio and friends constitute key contraception information sources for adolescents, and their use should therefore be explored to widely disseminate information to adolescents to enable them make well informed risk assessments in order to prevent early pregnancies and their associated consequences.

Although it is a taboo in most cultures in Ghana to have pre-marital sex, the findings from this study shows that sexual debut for some adolescents is 8 years. A little over half of the respondents (50%) reported that they have had sex before. Among those who have had sex before, 47% had their first sex at ages ranging from 14-16 and about 57% of them did not use condom at their first sex. This clearly indicates the need for adequate information to change adolescents' perception of the risk of unprotected sex. For many adolescents the benefits tend to be pleasure without any opportunity for assessing the real benefit over the risks particularly as first sex is mostly unplanned (Awusabo Asare et al, 2006).



By and large, the findings of this study are consistent with some of the illustrations discussed in the conceptual framework, which hypothesises 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 reproductive health provider attitudes, education and campaign programmes, cost, and service point distribution are planned to promote the service. In this study, predictive variables such as poor attitude of contraceptive providers, sex education, peer influence, knowledge of contraceptives, family – related factors and socio-demographic factors including age, and religion were all factors that contributed to non-use of modern contraceptives among adolescents.

### **5.5 Strengths and Limitations**

This study has helped to discover new findings influencing non-use of modern contraceptives among adolescents which has implication for adolescent health policy and interventions on sexual and reproductive health. The study however has some limitations. The data came from a cross-sectional study, and some of the variables such as sexual activity and contraceptive use were measured retrospectively. Thus the study may suffer from recall bias since there was no mechanism to independently verify respondents' self-reported data. However, the substantive level of correspondence between respondents and interviewers reports of communication suggests that recall bias may not be a serious problem that could introduce bias into the findings. Also, the study was conducted in only four stratified zones in the Sunyani municipality out of a total of six health sub-zones in the municipality. The findings may therefore not represent the general view of adolescents in the municipality.

## CHAPTER SIX

### CONCLUSION AND RECOMMENDATIONS

#### 6.1 Conclusion

This study set out to determine the factors that influence non-use of modern contraceptives among adolescents in the Sunyani municipality. To achieve this objective, a cross-sectional survey was conducted among 260 adolescents. Descriptive, bivariate and logistic regression analysis techniques were used to analyse and present the data. Results suggested that although majority of the respondents have heard about contraception and know about contraceptive methods, contraceptive prevalence was low. A number of socio-demographic factors such as age and educational status of adolescent were significantly associated with non-use of modern contraceptives. Older adolescents were more likely to practice contraceptive use than younger adolescents, also increasing in educational attainment tended to be associated with more modern contraceptive use. Other related reasons included lack of knowledge of contraceptive methods, poor attitude of contraceptive providers and partner opposed to use of modern contraceptives. Based on these findings, this study concludes that more public health education alongside other interventions to increase contraceptive prevalence among adolescence who are sexually active are urgently need. And that increasing use of modern contraceptives requires community-wide, and multifaceted interventions, which should aim to counter negative perceptions of modern methods. More specific recommendations are made in the next section.

## 6.2 Recommendations

Considering the findings of the study, the following recommendations are made to help address non-use of modern contraceptives among adolescents.

First, adolescents who were aged 17-19 were at a reduced odd of not using contraceptives when compared to those aged 14-16. It is important therefore for the Ghana education service and the Ghana health service to ensure that pragmatic adolescent reproductive health programmes target adolescence aged 14 to 16 and below at the Basic and Secondary schools as well as adolescents without any formal education. This will help to promote contraceptive use among the younger ones and will encourage more uneducated adolescents to use contraceptives in order to reduce teenage pregnancy and child birth.

Second, findings from the study suggested that while awareness and knowledge of contraceptive was very high 95.4%, contraceptive prevalence was still very low 38.2%. The Ghana health service and the Ghana education service should develop and implement positive behavior change programmes in devise ways to provide adolescents with greater awareness of the risk of unsafe sexual practices which include acquiring STIs or HIV/AIDS and to enable them take control over their sexual lives in a responsible manner.

Third, adolescent perception about attitude of service providers came up as a reason for non- use of contraceptives among adolescents who don't use modern contraceptives. It is therefore recommended that the Ghana health service train or retrain all reproductive health service providers in the Sunyani municipality in the provision of youth friendly services to enable them provide friendly services to adolescents.

Finally, adolescent perception about fear of side effects also came up as a reason for non-use of contraceptives among adolescents who don't use modern contraceptives. The Ghana health service should therefore institute informational and educational programmes to address real and perceived side effects, as well as provider-level training, particularly at hospitals and clinics, to ensure that adolescents know what to expect when using modern contraceptive methods



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## APPENDICES

### APPENDIX 1: CONSENT FORM

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

**Project Title:** Factors influencing non-use of modern contraceptives among adolescents in the Sunyani Municipality

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

#### **Purpose of Research**

My name is Adam Abdul-Razak, a master of public health student at the school of public health, University of Ghana. I am conducting a study on Factors influencing non-use of modern contraceptives among adolescents in the Sunyani Municipality. I am interested in understanding the level of knowledge of modern contraceptive among adolescents in the Sunyani municipality, do adolescents in the Sunyani municipality use modern contraceptives. I also want to know the factors that influence the non-use of modern contraceptives among adolescents in the Sunyani municipality. I would greatly appreciate your participation in my study. Your insight will assist me in understanding the reasons behind non-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 non-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, **Adam Abdul-Razak** on phone number: **0247554150**

Or email: [zakus52002@yahoo.com](mailto:zakus52002@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 non-use of modern contraceptives among adolescents in the Sunyani Municipality

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

**Purpose of Research**

My name is Adam Abdul-Razak, a master of public health student at the school of public health, University of Ghana. I am conducting a study on Factors influencing non-use of modern contraceptives among adolescents in the Sunyani Municipality. I am interested in understanding the level of knowledge of modern contraceptive among adolescents in the Sunyani municipality, do adolescents in the Sunyani municipality use modern contraceptives. I also want to know the factors that influence the non-use of modern contraceptives among adolescents in the Sunyani municipality. I would greatly appreciate your participation in my study. Your insight will assist me in understanding the reasons behind non-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 non-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, **Adam Abdul-Razak** on phone number: **0247554150**

Or email: [zakus52002@yahoo.com](mailto:zakus52002@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 non-use of modern contraceptives among adolescents in the Sunyani Municipality

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

**Purpose of Research**

My name is Adam Abdul-Razak, a master of public health student at the school of public health, University of Ghana. I am conducting a study on Factors influencing non-use of modern contraceptives among adolescents in the Sunyani Municipality. I am interested in understanding the level of knowledge of modern contraceptive among adolescents in the Sunyani municipality, do adolescents in the Sunyani municipality use modern contraceptives. I also want to know the factors that influence the non-use of modern contraceptives among adolescents in the Sunyani municipality. I would greatly appreciate your child/guardian participation in my study. The insight of your child/guardian will assist me in understanding the reasons behind non-use of modern contraceptive and 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 non-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 – 15minutes.

### **Risks and benefits:**

In this study there will be questions concerning level of knowledge, sexual behaviour 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. Minimal or no risk is associated with this study.

The result of the study will be disseminated. This 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 monetary 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 or 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, **Adam Abdul-Razak** on phone number: **0247554150**

Or email: [zakus52002@yahoo.com](mailto:zakus52002@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 Participant: .....

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 non-use of modern contraceptive among adolescents in the Sunyani Municipality. 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 14-19 years are eligible for this study.**

**A. SOCIO-DEMOGRAPHIC CHARACTERISTICS**

	<b>QUESTIONS</b>	<b>RESPONSE</b>	<b>CODE</b>
Q1	How old are you?		
Q2	Sex	Female <input type="checkbox"/>	1
		Male <input type="checkbox"/>	2
Q3	Highest level of education	none <input type="checkbox"/>	1
		Primary <input type="checkbox"/>	2
		JHS <input type="checkbox"/>	3
		Secondary <input type="checkbox"/>	4
		Tertiary <input type="checkbox"/>	5
Q4	Religious affiliation	Christianity <input type="checkbox"/>	1
		Islamic <input type="checkbox"/>	2
		Traditional <input type="checkbox"/>	3
Q5	Marital Status	Married <input type="checkbox"/>	1
		Not married <input type="checkbox"/>	2
		Divorced <input type="checkbox"/>	3
		Separated <input type="checkbox"/>	4
		Co-habiting <input type="checkbox"/>	5
Q6	Place of residence		
Q7	What is the highest level of education of your mother?	None <input type="checkbox"/>	1
		Primary <input type="checkbox"/>	2
		JHS <input type="checkbox"/>	3
		Secondary <input type="checkbox"/>	4
		Tertiary <input type="checkbox"/>	5
Q8	What is the highest level of education of your father?	None <input type="checkbox"/>	1
		Primary <input type="checkbox"/>	2
		JHS <input type="checkbox"/>	3
		Secondary <input type="checkbox"/>	4
		Tertiary <input type="checkbox"/>	5
Q9	Who do you stay with?	Parents <input type="checkbox"/>	1
		Guardian <input type="checkbox"/>	2
		Partner <input type="checkbox"/>	3
		By myself <input type="checkbox"/>	4
Q10	Occupation of father		
Q11	Occupation of mother		
Q12	Occupation of other Guardian		

**B. Awareness and Knowledge of contraceptives**

	<i>QUESTIONS</i>	<i>RESPONSE</i>	<i>CODE</i>
Q13	Have you ever heard about contraception?	Yes <input type="checkbox"/>	1
		No <input type="checkbox"/>	2
Q14	If yes, how did you hear about it?	Radio <input type="checkbox"/>	1
		Teacher <input type="checkbox"/>	2
		Health worker <input type="checkbox"/>	3
		Family member <input type="checkbox"/>	4
		Friends <input type="checkbox"/>	5
		Partner <input type="checkbox"/>	6
		Print media <input type="checkbox"/>	7
Others specify.....			
Q15	Contraception is any method or procedures used to prevent pregnancy?	Yes <input type="checkbox"/>	1
		No <input type="checkbox"/>	2
		Don't know <input type="checkbox"/>	3
Q16	Have you ever heard of any contraceptive methods before?	Yes <input type="checkbox"/>	1
		No <input type="checkbox"/>	2
		<b>If No skip to question 23</b>	
Q17	Have you heard of modern contraceptives?	Yes <input type="checkbox"/>	1
		No <input type="checkbox"/>	2
Q18	If yes, mention the methods that you know	IUD <input type="checkbox"/>	1
		Injectable <input type="checkbox"/>	2
		Implants <input type="checkbox"/>	3
		Pills <input type="checkbox"/>	4
		Female condom <input type="checkbox"/>	5
		Male condom <input type="checkbox"/>	6
		Diaphragm <input type="checkbox"/>	7
		Lactational Amenorrhea Method <input type="checkbox"/>	8
		Others (specify)	
Q19	Where did you hear of this contraceptive(s) you have mentioned in 18 above?	Radio <input type="checkbox"/>	1
		Family member <input type="checkbox"/>	2
		Friends <input type="checkbox"/>	3
		Partner <input type="checkbox"/>	4
		Print media <input type="checkbox"/>	5
		Teacher <input type="checkbox"/>	6
		Health worker <input type="checkbox"/>	7
Others state.....			

	<b>QUESTIONS</b>	<b>RESPONSE</b>	<b>CODE</b>
Q20	Do you know a place in your community where you can get a modern contraceptive?	Yes [ ]	1
		No [ ]	2
Q21	If yes, where?	Hospital /Clinic [ ]	1
		Pharmacy/Drug store [ ]	2
		Health provider [ ]	3
		Family Planning/PPAG Clinic [ ]	4
		Friend [ ]	5
		Other specify .....	
Q.22	Can a girl become pregnant from just one unprotected sex?	Yes [ ]	1
		No [ ]	2
		Don't know [ ]	3
		Other specify .....	
Q.23	Do you think that using modern contraceptive during sex provide 100% protection from pregnancy?	Yes [ ]	1
		No [ ]	2
		Don't know [ ]	3
		Other specify .....	
Q.24	Overall, do you think contraception is a woman's business and a man should not have to worry about it?	Yes [ ]	1
		No [ ]	2
Q.25	Women who use contraception may become promiscuous?	Yes [ ]	1
		No [ ]	2

**C. Modern Contraceptive use among Adolescents**

Q.26	Have you ever had sex before?	Yes <input type="checkbox"/>	1
		No <input type="checkbox"/>	2
		<b>If No skip to question 29</b>	
Q.27	How old were you when you first had sexual encounter?		
Q.28	Did you use condom or any contraceptives the first time you had sexual intercourse?	Yes <input type="checkbox"/>	1
		No <input type="checkbox"/>	2
		Not applicable <input type="checkbox"/>	3
Q.29	Have you used any contraceptive before?	Yes <input type="checkbox"/>	1
		No <input type="checkbox"/>	2
		<b>If No skip to question 36</b>	
Q.30	Which of the methods have you ever used?	IUD <input type="checkbox"/>	1
		Injectable <input type="checkbox"/>	2
		Implants <input type="checkbox"/>	3
		Pills <input type="checkbox"/>	4
		Female condom <input type="checkbox"/>	5
		Male condom <input type="checkbox"/>	6
		Diaphragm <input type="checkbox"/>	7
		Lactational Amenorrhea Method <input type="checkbox"/>	8
		None <input type="checkbox"/>	9
		Others (specify) .....	
Q.31	Which of the methods are you currently using?	IUD <input type="checkbox"/>	1
		Injectable <input type="checkbox"/>	2
		Implants <input type="checkbox"/>	3
		Pills <input type="checkbox"/>	4
		Female condom <input type="checkbox"/>	5
		Male condom <input type="checkbox"/>	6
		Diaphragm <input type="checkbox"/>	7
		Lactational Amenorrhea Method <input type="checkbox"/>	8
		None <input type="checkbox"/>	9
		Others (specify) .....	
Q.32	Where do you get this modern contraceptive in the municipality from?	Hospital /Clinic <input type="checkbox"/>	1
		Pharmacy/Drug store <input type="checkbox"/>	2
		Health provider <input type="checkbox"/>	3
		Family Planning/PPAG Clinic <input type="checkbox"/>	4
		Other specify .....	

Q.33	How long have you been using modern contraceptives?	One month and above <input type="checkbox"/>	1
		One to two years <input type="checkbox"/>	2
		Three to five years <input type="checkbox"/>	3
		Six to 10years <input type="checkbox"/>	4
		Six to 10years <input type="checkbox"/>	5
		Others (specify) .....	
Q.34	How often do you use any of the methods?	Every time <input type="checkbox"/>	1
		Once a while <input type="checkbox"/>	2
		Not at all <input type="checkbox"/>	3
		Others (specify) .....	
Q.35	What are your reasons for using modern contraceptives?	To avoid teenage pregnancy <input type="checkbox"/>	1
		To prevent STIs <input type="checkbox"/>	2
		To delay childbirth <input type="checkbox"/>	3
		Others (list).....	
Q.36	Who in your opinion should use modern contraceptives?	Married couples only <input type="checkbox"/>	1
		All sexually active persons <input type="checkbox"/>	2
		Adults only <input type="checkbox"/>	3
		Other specify .....	
Q.37	The last time you had sex did you or your partner use any contraceptive?	Yes <input type="checkbox"/>	1
		No <input type="checkbox"/>	2
		Not applicable <input type="checkbox"/>	3
		<b>If No or Not applicable skip to question 42</b>	
Q38	Which method of contraceptive did you use? Which type? Tick as appropriate.	Female sterilization <input type="checkbox"/>	1
		Condom( female& male) <input type="checkbox"/>	2
		Implants <input type="checkbox"/>	3
		Injectables <input type="checkbox"/>	4
		Pills <input type="checkbox"/>	5
		IUCD <input type="checkbox"/>	6
		Spermicides <input type="checkbox"/>	7
		Diaphragm <input type="checkbox"/>	8
		Lactational amenorrhea <input type="checkbox"/>	9
		Male sterilization <input type="checkbox"/>	10
		Other specify .....	
Q39	The last time you used a contraceptive who decided on what to use?		1



		Influence [ ]	
		You [ ]	2
		Friend [ ]	3
		Partner [ ]	4
		Parent [ ]	5
		Others specify .....	


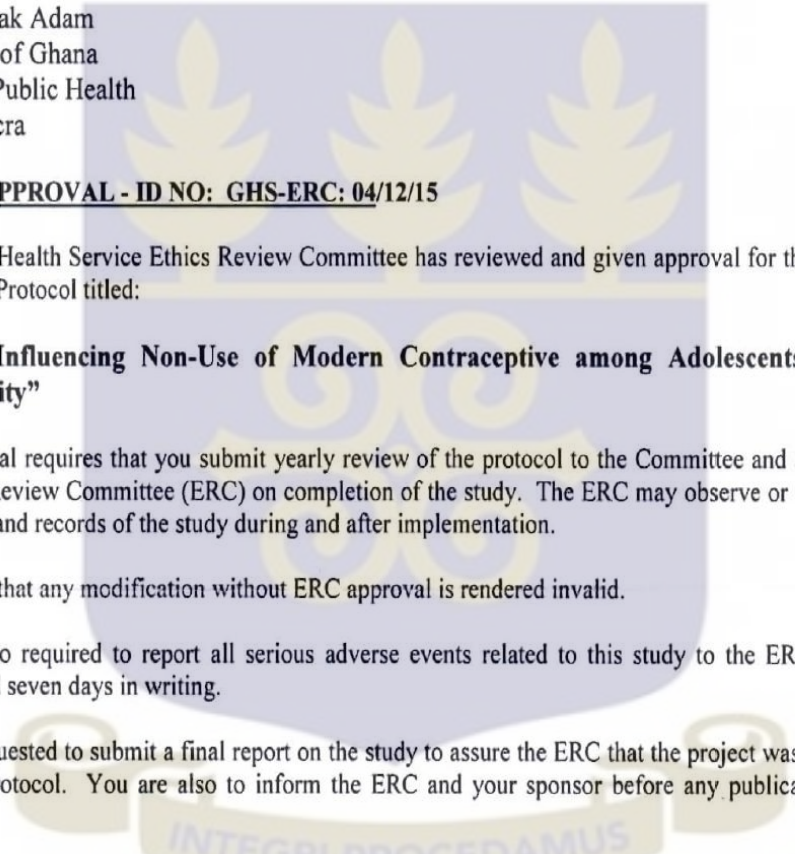

Q40	If you wanted to, could you yourself get any modern contraceptives	Yes [ ]	1
		No [ ]	2
		<b>If No skip to question 42</b>	
Q41	If yes, which modern contraceptive methods?	IUD [ ]	1
		Injectable [ ]	2
		Implants [ ]	3
		Pills [ ]	4
		Female condom [ ]	5
		Male condom [ ]	6
		Diaphragm [ ]	7
		Lactational Amenorrhea Method [ ]	8
		None [ ]	
		Others (specify) .....	
Q42	Do you currently have a sexual partner (boyfriend/girlfriend)?	Yes [ ]	1
		No [ ]	2
Q43	How many sexual partners (boyfriend/girlfriend) have you had in your lifetime?		
Q44	Within the last 12 months, how many sexual partners have you had?		
Q45	Have you ever had sexual intercourse while drunk?	Yes [ ]	1
		No [ ]	2
		<b>If No skip to question 48</b>	

Q46	If yes to question 45, did you or your partner use a condom?	Yes [ ]	1
		No [ ]	2
Q47	If yes to question 46, was it your idea to use a condom during sex?	Yes [ ]	1
		No [ ]	2
Q48	Do you feel any pressure from others to have unprotected sexual intercourse?	Yes [ ]	1
		No [ ]	2
		<b>If No skip to question 50</b>	
Q49	If yes to question 48, from whom do you feel the pressure?	Friends [ ]	1
		Relatives [ ]	2
		Partner [ ]	3
		Other specify .....	
Q50	Do you think sex education can influence modern contraceptive use or non-use?	Yes [ ]	1
		No [ ]	2
Q51	Does your school syllabus include sex education?	Yes [ ]	
		No [ ]	
		Don't know [ ]	
		Not applicable [ ]	
Q52	Did you get education on sex in school?	Yes [ ]	
		No [ ]	
		Don't know [ ]	
		Not applicable [ ]	
Q53	Did you get education on sex in the house?	Yes [ ]	1
		No [ ]	2
		Don't know [ ]	3

**D. Factors Influencing Non-Use of Modern Contraceptives**

Q54	Is there any cultural beliefs and practices that prevent the use of modern contraceptives among adolescents in your community?	Yes [ ]	
		No [ ]	
		Don't know [ ]	
		<b>If No skip to question 56</b>	
Q55	If yes to question 54, can you mention them		
Q56	Is there any religious beliefs and practices that prevent the use of modern contraceptives?	Yes [ ]	
		No [ ]	
		Don't know [ ]	
		<b>If No skip to question 58</b>	
Q57	If yes to question 56, can you mention them		
Q58	What will you say are the reasons why adolescents do not use contraceptives? (Can tick more than one)	Religious beliefs	1
		Distance to acquisition of contraceptives	2
		Attitude of the contraceptive providers	3
		Partner or family members opposed to using	4
		Side effects	5
		Lack of knowledge	6
		Infrequent sex	7
		Hard to get preferred methods	8
		Too costly	9
		Counselling received about contraceptives	10
		Cultural or traditional beliefs	11
Other, specify .....			

**APPENDIX 3: GHS ETHICAL CLEARANCE LETTER**

<b>GHANA HEALTH SERVICE ETHICS REVIEW COMMITTEE</b>		
<i>In case of reply the number and date of this Letter should be quoted.</i>		Research & Development Division Ghana Health Service P. O. Box MB 190 Accra Tel: +233-302-681109 Fax + 233-302-685424 Email: <a href="mailto:Hannah.Frimpong@ghsmail.org">Hannah.Frimpong@ghsmail.org</a>
My Ref. GHS/RDD/ERC/Admin/App/16/02 Your Ref. No.		3 <sup>rd</sup> February, 2016
Abdul-Razak Adam University of Ghana School of Public Health Legon, Accra		
<b><u>ETHICS APPROVAL - ID NO: GHS-ERC: 04/12/15</u></b>		
The Ghana Health Service Ethics Review Committee has reviewed and given approval for the implementation of your Study Protocol titled:		
<b>“Factors Influencing Non-Use of Modern Contraceptive among Adolescents in the Sunyani Municipality”</b>		
This approval requires that you submit yearly review of the protocol to the Committee and a final full review to the Ethics Review Committee (ERC) on completion of the study. The ERC may observe or cause to be observed procedures and records of the study during and after implementation.		
Please note that any modification without ERC approval is rendered invalid.		
You are also required to report all serious adverse events related to this study to the ERC within three days verbally and seven days in writing.		
You are requested to submit a final report on the study to assure the ERC that the project was implemented as per approved protocol. You are also to inform the ERC and your sponsor before any publication of the research findings.		
Please note that this approval is given for a period of 12 months, beginning 3 <sup>rd</sup> February, 2016 to 2 <sup>nd</sup> February, 2017. However, you are required to request for renewal of your study if it lasts for more than 12 months.		
Please always quote the protocol identification number in all future correspondence in relation to this approved protocol		
SIGNED.....		
	DR. CYNTHIA BANNERMAN (GHS-ERC CHAIRPERSON)	
Cc: The Director, Research & Development Division, Ghana Health Service, Accra		