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FACTORS INFLUENCING CONTRACEPTIVE USE AMONG ADOLESCENTS IN THE SUNYANI WEST DISTRICT.

BY

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DECLARATION

I, Jane Akasi Cobbold of University of Ghana School of Public Health, do hereby declare that apart from references and ideas that have been duly recognized, this dissertation is an original work produced by me under the supervision of Prof. Augustine Ankomah. This work has never been submitted in part or whole to any Institution or Board for the award of any degree.

…….. …….

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(Supervisor)

DEDICATION

To Mr. Caesar Amanie-Thompson and my entire family for the support and encouragement to always be the best.

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LIST OF ABBREVIATIONS

ASRH	Adolescent Sexual and Reproductive Health
CI	Confidence interval
CBR	Crude Birth Rate
CDR	Crude Death Rate
COR	Crude Odds Ratio
CPR	Contraceptive Prevalence Rate
DHIMS	District Health Information Management System
FP	Family Planning
GDHS	Ghana Demographic Health Survey
GHS	Ghana Health Service
GSS	Ghana Statistical Service
HIV	Human Immunodeficiency Virus
IUD	Intra-uterine Device
IPPF	International Planned Parenthood Federation
LAM	Lactational Amenorrhoea Method
LMICS	Low and Middle Income Countries
MOH	Ministry of Health

OR	Odds Ratio
STI	Sexually Transmitted infection
UNDEA	United Nations Department of Economic and Social Affairs
UNFPA	United Nations Fund for Population Activities
WHO	World Health Organization

ABSTRACT

Introduction: Adolescents access and correct usage of contraceptives is low leading to unwanted pregnancies which has multiple adverse effect on the adolescent such as teenage pregnancies and early motherhood, sexually transmitted infections, family and community especially in Ghana.

Objective: The objective of this study is to determine the factors influencing contraceptive use by adolescents in the Sunyani West District.

Methods: The study adopted a cross sectional study using self- administered questionnaires. Two hundred and sixty seven adolescents were sampled which required their knowledge, access, sexual behaviors and use of contraceptives. Descriptive bivariate and multivarite analysis were used for associations between the dependent variable and the independent variables.

Results: Knowledge was high 246 (92.13%) but use of contraceptive was low 81 (45.6%). Additionally, reasons for contraceptive use included to avoid pregnancy (71.7%), to prevent sexually transmitted infections (21.1%) and to delay childbirth (7.2%). The study found a significant association between contraceptive use and other factors such as sex education at school, having a sexual partner, had sex before, duration and frequency of sex and influence on contraceptive use.

Conclusion: Based on the findings that was obtained, the study recommends that interventions such as providing reproductive health education, training and developing adolescent friendly health services by service providers to promote and improve contraceptive use among adolescents.

CHAPTER ONE

INTRODUCTION

1.1 Background

Unmet need for contraception remain high and in Africa, 24.2% women of reproductive age have unmet need for contraceptive. In Asia, Latin America and the Caribbean contraceptive prevalence is high the level of unmet needs are 10.2 % and 10.7%, respectively (United Nations Department of Economic and Social Affairs Population Divison, 2015). Acquisition of contraceptives is an important tool to achieving the Sustainable Development Goals (SDG's) and other targets to improve health and reduce poverty, minimizing the number of 'accidental' pregnancies in developing countries. Assisting and ensuring adolescents use contraceptives successfully demands improving and increasing accessibility and quality of contraceptive information and services (Darroch, Sedgh, & Ball, 2011). Contraception is beneficial in so many ways which are: reducing pregnancy and its related risk, reduces rates of unintended and unsafe abortions, reduces infant mortalities, helps prevents HIV/AIDS, slows population growth, empowering people and enhancing education etc.

Adolescence is a development phase from childhood to adulthood between the ages of 13 – 19 years (South African Family Practice, 2010). Similarly Lebese et al., (2013) defined adolescence as "a period of change from childhood to adulthood".

This period is regarded with increased inquisitivity and exposure to risky behaviors comprising unsafe sex. This leads to adolescent pregnancy which is usually seen as a social and public health problem. This period can be both disorientation and discovery (WHO, 2017); it also brings issues of independence and self-identity. A lot of adolescents go through adverse health issues of early unprotected sexual activity although it varies for males and females. Sexually active adolescents

both married and unmarried need contraception(WHO, 2017).

Contraceptive use by adolescents is seen to be influenced by several elements such as, socio-economic status, knowledge about contraceptives, approaches on matters related to contraceptives, place of stay, educational status, counseling received on contraceptives, attitudes of the contraceptive providers, cultural values, beliefs and customs (Kanku & Mash, 2010).

An estimated 16 million adolescents aged 15–19 deliver each year. Complications from pregnancy and childbirth are the primary roots of death in girls aged 15-19 in Low and Middle Income Countries (LMIC) where virtually all of the projected 3 million unsafe abortions happen with perinatal deaths considerably greater in babies born to adolescent mothers (Janowitz et al., 2012). Promoting contraceptives use and safe sexual practices among young people is key in limiting adverse reproductive health outcomes (Bearinger et al., 2007). Studies also indicate that contraceptive usage among adolescents in sub-Saharan Africa is still very low. Among the few who use them, majority use just for child spacing and not for the limiting of the number of children (Yoder, Guèye, & Konaté, 2011). It is in view of this that the study seeks to determine the factors influencing the use of contraceptives in the Sunyani West District.

1.2. Problem Statement

Unmet need for contraception among adolescents is high which predisposes them to unwanted pregnancies, STI's and unsafe abortions (Blum, 2007). Teenage pregnancies are the leading cause of school dropout (about 13,000) among adolescent girls in Kenya (Hussain, 2012). Prevalence in Ghana is 17%, Accra it is 33% and Brong Ahafo is 27% with that for adolescents 15 – 19 years is about 10% (Ghana Statistical Service, 2011; Multiple Indicator Cluster Survey, 2011). Also, 14% of women aged 15-19 have initiated childbirth; either they have had a live birth (11%) or are pregnant with their first child (3%), a small rise from 13% in 2008. Teenage

childbearing is higher in rural areas (17%) than in urban areas (12%) (Ghana Statistical Service, Ghana Health Service, & ICF Macro, 2014). In Ghana, the average birth rate per 1000 girls aged 15 – 19 years is 60/1000 women and by region, the proportion of teenage girls who have started childbirth ranges from 8% in the Greater Accra region to 21% in the Brong Ahafo and 22% in the Volta region (Ghana Statistical Service et al., 2014).

Furthermore, a considerable number of abortions among this group take place outside health facilities without professionals. Post-abortion outcomes comprising death in extreme cases, cannot be overlooked. For instance, as high as 30% of women and 39% of men 12-24 years in Ghana recounted that the last abortion they were involved happened at home (Ghana Statistical Service et al., 2014). A 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 Regional Health Directorate, 2014) . A total of 259 teenage pregnancies were noted between January to June 2014 in the Sunyani West District of the Brong Ahafo Region (Brong Ahafo Regional Health Directorate, 2014).

Contraceptive use among adolescents have also revealed that the motives that influence non-use among adolescents are varied and include high cost and negative attitudes of service providers (Nyarko, 2015). Registered nurses additionally indicated that adolescents would choose termination of pregnancy (TOP) as an alternative method of contraceptive other than preventive measures (Lebese et al., 2013).

Acquiring in-depth knowledge and understanding about contraceptive and effective usage by adolescents can be an important step towards effective delivery of family planning and contraceptive services. This study therefore seeks to fill this gap by investigating the factors associated with the use of contraceptive among adolescents in the Sunyani West District.

1.3. Conceptual Framework

Figure 1 below is an illustration of the conceptual framework for this study showing the association between the various aspects that influence the usage of contraceptive by adolescents. It shows the specific directions by which the research will be conducted. This framework is based on the theory of reasoned action which states that behavior is influenced by several factors (Ajzen and Fishbein, 1980). It shows the links between beliefs, norms, attitudes, intentions and actions of an individual. The dependent variable (contraceptive use) and the independent variables all in one way or the other influence contraceptive use by adolescents in the Sunyani West district. Variables such as sex education, peer influence, knowledge and access to information are key to contraceptive utilization. A study indicated that activities and programs targeted to maximize contraceptive usage, should address inadequate and poor knowledge on the methods used (Hindin et al., 2014). Socio-demographic factors including age, belief, ethnicity and religion are all factors that contribute to use of contraceptives. The believe that contraception provides protection against unwanted pregnancies and sexually transmitted infections by the adolescent would mean he or she taking actions to either minimize or prevent it from occurring. Differences in contraceptive utilization among various religions could be as a result of the different doctrines on contraceptive usage (Wusu, 2015). Factors such as the economic status of parent or guardian, marital status, and others have all been known to influence adolescent pregnancy. Socio economic status of adolescents also could empower their decision-making on contraceptives hence, increase its use.

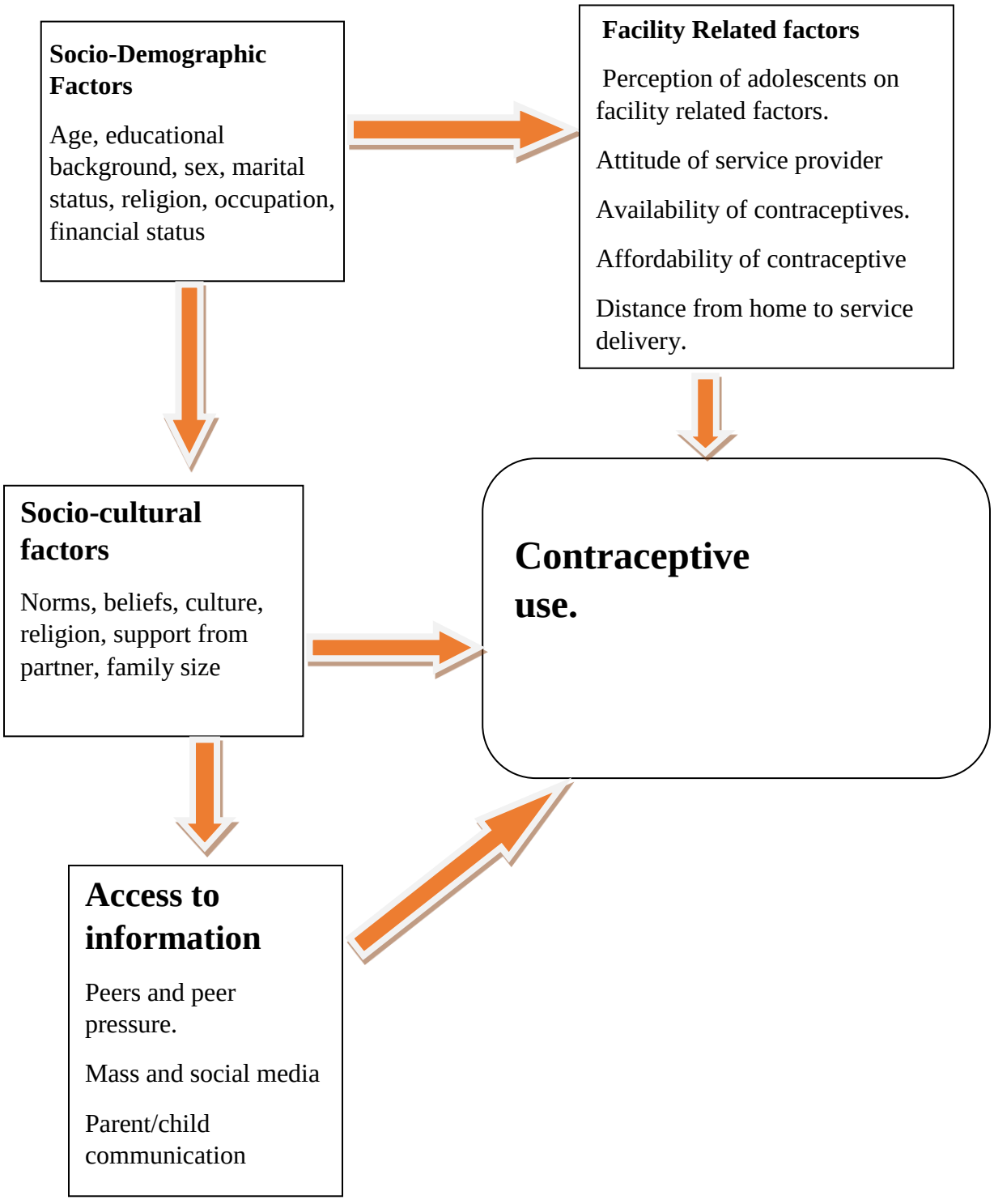

Figure 1.1: Conceptual framework on factors associated with contraceptive use by adolescents.

1.4. Objectives of Study

1.4.1 General Objective

The general objective is to determine the factors influencing contraceptive use among adolescents in the Sunyani- West District.

1.4.2 Specific Objectives

The specific objectives are:

1. Assess the knowledge level and its utilization on contraceptive uptake among adolescents in the Sunyani – West District.
2. Determine the level of contraceptives use among adolescents in the Sunyani West District.
3. Assess the factors associated with and promoting contraceptive use among adolescents in the Sunyani West District.
4. To determine the facility related factors as perceived by adolescents that influence contraceptive uptake.

1.5. Research Questions

i. What is the level of knowledge of contraceptives among adolescents in the Sunyani – West District?

ii. What factors influence adolescents use of contraceptives in the Sunyani-West District?

iii. What are the factors of contraceptive use as perceived by adolescents in the Sunyani – West District?

1.6. Study Justification

Adolescent pregnancy is on the rise in Ghana and this indicates a serious danger to the development of the country (Ghana Statistical Service et al., 2014). Early transition of the adolescent into motherhood minimizes the search for higher educational level and career development (Ikamari & Towett, 2007). Uptake and correct usage of contraceptives by adolescents is important in the avoidance of teenage pregnancy, termination of pregnancy and transmission of sexually transmitted infections (Lebese et al., 2013). A holistic investment in adolescent contraception is key and cost effective in minimizing unplanned pregnancies and caring for more children (Crissey, 2008)

Findings from the study will help identify the level of uptake of contraceptive by adolescents in the district. It will help identify the factors responsible for the utilization especially in the region and help target interventions and policies. This study will also complement to the few current literature and further serve as the basis for other studies to be conducted. More importantly, the study's recommendations will help strengthen institutions and guide policies towards increasing the prevalence of contraceptive so as to enhance Ghana's chances of meeting the post-MDG goals on reproductive health.

CHAPTER TWO

LITERATURE REVIEW

2.1 Concepts on Contraception

Contraception can be termed as family planning where its usage permits the individual to make choices as to the number of children to have and when. Contraception minimizes the need for abortion and also prevents deaths by mother and children (WHO, 2017). Similarly, (Darroch et al., 2011) defined contraception as a deliberate avoidance of conception through the usage of numerous devices, sexual practices, chemicals, drugs, or surgical procedures.

The National Population Policy of Ghana set a target to reach a contraceptive use rate of 15% by the year 2000, 28% by the year 2010 and to 50% by the year 2015. Between the years 1998 and 2003, Ghana saw an increase in total Contraceptive use, reaching 26 percent (USAID Deliver Project, 2011).

2.2 Describing Adolescent Sexuality

Adolescence is a phase from childhood to adulthood between the ages of 13 – 19 years (South African Family Practice, 2010). Similarly (Lebese et al., 2013) defined adolescence as "a period of change from childhood to adulthood".

Adolescent population forms nearly 33% of Sub-Saharan Africa's population, which makes prioritizing their health an absolute necessity (Kabiru et al., 2013). In understanding areas of their health requiring the most attention, it is vital to note that the number of sexually active adolescents is increasing globally, with many initiating such sexual activity within, or outside of, formal unions (Ngome & Odimegwu, 2014).

2.3 Prevalence of Contraceptives

The Contraceptive usage rate is a measure of reproductive age women who are using or whose partner is using a contraceptive at a precise period in time, recounted for women married or in sexual union and low prevalence among adolescents (Ghana Statistical Service et al., 2008, 2014). Contraceptive prevalence rate amongst adolescents aged 15 to 19 years was 17% and 5% according to GDHS 2014 and 2008 respectively (Ghana Statistical Service et al., 2008, 2014).

In a study on female undergraduate students in two universities in Tanzania where 70.4% of the participants were sexually active only 41.5% reported currently using contraceptives (Somba et al., 2014). Participants knew of at least one method of contraception and about 87.5% approved of contraception. But less than half (38.1%) had ever used and (34.2%) were currently using a contraceptive method (Arowojolu et al.,2002).

Adolescents are conscious of the accessibility of contraceptive services but lack understanding about contraception and contraceptives leading to negative attitudes towards using the services (Lebese et al., 2013). However, only 8% of married women aged 15-19 and 16% of those aged 20-24 use modern contraceptive methods. “There are 5% of married youth aged 15-24 who depend on traditional methods and 63% of sexually active unmarried women 15-19 years and 43% of sexually active unmarried women 20-24 years who are not using contraceptives” (Nalwadda et al.,2010).

In another study with 630 adolescents, most of the students were sexually active. This means age at first sex was 15.6 years (SD ± 1.3). The contraceptive commonly used was the condom although 'coitus interruptus', 'natural family planning' and 'no method' were also stated. Knowledge among students after they received sex education was considerably well. This study indicated a lower mean age at first intercourse than has been stated for earlier by other authors

(Capuano et al.,2009). An adolescent study showed that more than half of sexually active adolescents had ever used a contraceptive method with condom as the most used (Awusabo-asare et al., 2006). Another study also found that 67% of sexually active adolescents had ever used a modern contraceptive, with 55% using it during the first sexual encounter while about 30% used it consistently and 44% used it sometimes (Boamah et al., 2014).

"In sub-Saharan Africa, 67% of married adolescent women who wish to avoid pregnancy for at least the next two years are not using any contraceptive, and 12% are using traditional methods" (IPPF, 2010) which are often unreliable. A study on prevalence of contraceptive use among women of reproductive age in Calabar, Nigeria, revealed that a greater proportion (78.4%) of the respondents were not currently using any contraceptive and the prevalence of contraceptive use was 21.6% (Eko et al., 2013). Environmental disparities and factors influencing contraceptive use in Ethiopia, indicated contraceptive prevalence of 27.3% with variation in residential status (urban 49.5%, rural 22.5%) (Lakew et al., 2013). "In Southern Africa, where contraceptive use is 58%, unmet need for family planning is relatively low 16%. In Western Africa, in contrast, only 8% of women use modern contraceptive, 5% use traditional methods, and the unmet need is 23%" (Gribble & Haffey, 2008). It is however observed that, 62% of married women in developing countries practice modern contraception (Creanga et al.,2011). It was also reported in another study that, almost 51% of the adolescent respondents stated that they were using contraceptives (Ramathuba, Khoza, & Netshikweta, 2012).

2.4 Knowledge of Contraceptives among Adolescents

Two determinants of contraceptive use amongst adolescents are knowledge and availability. However, intra-uterine device is commonly available in the Middle East (Ross & Stover, 2013). An evaluation of global access to contraceptives by (Westley et al.,2013) reported in a study

done in Senegal and Nigeria that major challenges still exist in level of knowledge of contraception. A lot of young women are neither aware nor know of contraceptive methods. Even where they are aware and do know the different methods, they usually do not have access to them (Parker, 2005). Inadequate knowledge may also rise from widespread assumptions and apathy (Appiah-Agyekum & Kayi, 2013).

Education is an important socio economic factors that widely influence contraceptive use. Educated women had better chances of contraceptive use than uneducated married women (Lakew et al., 2013). The usage of family planning methods is positively associated with higher level of education. A study in Catalonia, Spain specified that factors which influenced the use of contraceptives are level of education (30.59% and 39.29% more likelihood) and having children over 14 (35.35% more likelihood), (Saurina, Vall-llosera, & Saez, 2012). Educational level was also found to positively influence contraceptive use in a related studies (Michael, 2012).

A major factor linked with non-use of contraceptives is lack of knowledge on contraceptives or unmet need for contraceptives. Most adolescent also do not patronize contraceptives due to deficient knowledge about its use or the method to use (Kumar et al.,2007). Acquiring knowledge on contraception is a vital step to accessing family planning services and choosing a suitable method. Ability to identify a family planning method when it is defined as a simple test of a participant's knowledge on the method but not certainly a signal to an extent his or her level of knowledge (Ghana Statistical Service et al., 2014). In Ghana for example, according to the Ghana Demographic and Health Survey (2014), the percentage of women including adolescents who identify any method has risen from 76% in 1988 to 98% in 2003 and 2008 and 12 to 99% in 2014 (Ghana Statistical Service et al., 2014).

2.5 Factors Influencing Contraceptive Use among Adolescents

Several factors may influence contraceptive use and non-use especially among young women in general. For example, Kisaakye, (2014) in a study done in Uganda indicated that the main factor that influence the use of contraceptive is the concern about health risks or side effects. Side effects influence the decision to use contraceptives by adolescents. The absence of menstruation and fear of being rendered infertile with the use of hormonal contraceptive deter adolescents from its use (Williamson et al., 2009). Non- use of contraceptives by female students (77.5%) aged 15 – 24 years was due to the fear of side effects (Abiodun & Balogun, 2009). It has been estimated that two-thirds of all unintended pregnancies in developing countries happen among women and adolescents who do not utilize contraceptives (Mbizvo & Zaidi, 2012).

A number of studies have highlighted the problem of low contraceptive usage among adolescents as well as the reasons for non- use. Continuation of contraceptive by adolescents is not assured, because most adolescents are not consistent in the use of contraceptives. The reasons given were fear of side effects, convenience of use, change of needs, and switch to other methods. Most sexually experienced teens (78% of females and 85% of males) in the United States used contraceptives during their first sexual intercourse. Other methods used are pills, and long-acting methods like IUD and implants (Singh, Darroch, & Ashford, 2014). Most adolescents are mostly confused as to whether they have the legal right to use contraceptives and even if they had, which type of contraceptive to use and where to get it from. They are also concerned about how to use contraceptives (Odu & Ayodele, 2007). 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, 19% of adolescents in the middle of their schooling used condom and 77% think condoms are more reliable (Ojikutu, Adeleke, Yusuf, & Ajijola, 2010). Another study in Nigeria found that adolescent who had early sexual debut are least expected to

use contraceptive than older women, and that 77% of adolescents knew about some type of contraceptive but they did not use them (Ojikutu et al., 2010). A study in the Niger Delta of Nigeria also revealed that lack of resources reduces accessibility to contraceptive and reproductive advice in developing countries. It further stressed that this situation has been exacerbated by religious beliefs that discourage the use of artificial birth control or family planning methods (Ibrahim & Olugbenga, 2012).

In Ghana presently, use of any method of contraception is 23% among women; 27% among married women; and 45% among sexually active women who are not married (Ghana Statistical Service et al., 2014). Contraceptive usage differs with a woman's age. It is lowest among adolescent girls aged 15-19 (19%), since they are in the primary phases of family building. Injectables are the most used method currently among married women (8%), followed by the implants and the pill (5% each) (Ghana Statistical Service et al., 2014). Universally, sexually active unmarried adolescents are not looking for to become pregnant and married adolescents may not wish to become pregnant at a young age or, if they have already had a child, desire to defer a second pregnancy (Ali, Cleland, & Shah, 2012).

Factors for non-use of contraceptives in Ghana comprise of fear of side effect and resistance to use on religious ground (Ghana Statistical Service et al., 2008). Partner negation and the fact that some adolescents feel they are not disposed to pregnancy are some reasons why adolescents do not use contraceptives (Mbizvo & Zaidi, 2012).

2.6. Health Facility /Provider Related Factors that Influence Contraceptive Uptake by adolescents

Contraceptive uptake could also be influenced by factors related to the provider of the contraceptive services. A comparative study between United Kingdom and Germany found some

disparities in the choice of contraceptives. The study concluded that changes between countries indicated preference of contraceptive was influenced by health care policy, the organization of the relevant services and differential provider choices (Oddens & Lehert, 1997).

In a related study, health worker attitude was said to influence contraceptive access to adolescents. To improve contraceptive uptake, 42% of participants sensed that health care providers required to demonstrate positive attitude towards them; they should be caring, patient, friendly, and improve communication (Ramathuba et al., 2012).

Attitude of providers may be classified as sympathetic and supportive, less sympathetic and judgmental (Awusabo-asare et al., 2006). While sympathetic providers create youth friendly images for their centers and thus promote patronage from adolescents, less sympathetic and judgmental ones serve as barrier to the utilization of their services (Awusabo-asare et al., 2006). Kisaakye, (2014) has also recommended that other factors that influence contraceptive use may include misperceptions about the protection and effectiveness of long acting reversible contraceptives, inadequately trained providers and the relative complexity of providing long acting reversible contraceptives compared with short term contraceptive methods.

Maya(2009), also found that health service factors which include the attitude of the providers, availability and affordability of contraceptives affect contraceptive use. Maya, (2009) also acknowledged that some providers stigmatize adolescent sexuality and are unwilling to acknowledge adolescents' experiences as contraceptive users. Other factors such as lack of privacy and confidentiality at the health facilities deter young women from patronizing their services (Maya, 2009).

A study by Essaka (2015), revealed that there were instances where health care providers were unable to provide services because resources and logistics were not available. Also, Essaka

(2015) found that the consequences of breakdown in traditional institutions such as the system of clan elders, uncles, and aunts' role in preparing young people for responsible adulthood also affect young women's contraceptive use. Essaka (2015) therefore argues that parental or community acceptance of contraceptive services for young women cannot be ignored as it impacts access to family planning services as obtaining parental consent which is a structural barrier that affects young women's utilization of sexual and reproductive health services.

Supply and demand factors have intense influence in usage on contraceptive services which include use of contraceptive method (Mwaikambo et al.,2011). Accessibility, reliability and awareness to needs of contraceptives were also indicators in the uptake of contraceptive by Iranian women (Mackenzie et al., 2013). This was obvious in Iranian studies where women utilizing contraceptives were displeased with monthly provision which led to seeking services from private outlets (Mackenzie et al., 2013). When a method was chosen, clients were only informed how to use it and when to return for re-supply. Possible side-effects were seldomly said. No information was given during consultations concerning sexually transmitted diseases and HIV/AIDS and little or nothing of the related social situation of the client was discussed (Mackenzie et al., 2013).

A study on knowledge, attitudes and practice of contraceptives found that 60% of the participants were not utilizing the health care services for contraceptives, giving reasons such as too far away (9%), culturally not acceptable (12%), shy (21%), services not available (9%), and the staff were not welcoming (16%) were given (Ramathuba et al., 2012). Shyness to access contraceptive services could be influenced by cultural non permissiveness among adolescents.

2.7. Socio-Cultural Factors

Socio-cultural beliefs and practices also influence contraceptive uptake. In many portions of the

world, women do not have the resolution making power, or access to substantial resources to seek family planning services. A study found factors to be significantly associated with contraceptive uptake were: traditional cultural beliefs, and support from husband/partners while religion, decision maker on preferred number of children in the family were not closely linked with the use of contraceptives (Michael, 2012). Some parents are of the view that exposure of adolescents to sexual and reproductive health services will lead them to early sex. Even some believe that the availability of condom and other family planning methods was the result of sexual promiscuity among adolescents (Awusabo-asare et al., 2008).

Within the US Latina population, religion is found to influence views of best family size but did not negatively influence contraceptive use. "Socioeconomic factors, such as low education levels, were found to influence family size far more than religious factors". Once the resolution to use contraception was made, contraceptive choices was largely influenced by factors such as suitability of the method, peer influences, number of current children, age of the woman, and education of the husband and wife (Srikanthan, 2008). Regardless of the religious allowance of contraception, not all Hindu women use contraceptive methods. Lack of family planning success in India among Hindu women has been associated to cultural conflict and lack of female empowerment (Srikanthan, 2008). Some extremist Muslims claim that any form of contraception break up God's purpose (Nisar, 2012). A woman's readiness to use contraceptive is affected by whether she recognizes with orthodox or traditional understanding of her religion (Srikanthan, 2008). "At the community level, access to contraception may be disrupted by standards and beliefs that adolescents should not be sexually active and so do not need contraception" (Miano, 2014). The dilemma is between tradition requiring adolescents to have many children and their right to use contraception in order to defer or delay childbirth until they have completed school or become financially independent (Wanjiru & Bscn, 2012).

A study in six African countries revealed that fecund women and women whose husbands approved of contraception were more likely to be using contraception in all six study countries. Observing further that, women who reported regular dialogue of family planning with their partners were more likely to be using contraception than women who reported they never discussed family planning (Williamson et al., 2009). Level of acceptance of family planning among women in the community was another significant factor for contraceptive use in four African countries: Kenya, Malawi, Tanzania, and Ghana. This shows the importance family and friends play on contraceptive uptake. There is little relationship between religiosity and birth control use. A study found that a strong family religiosity have a negative effect on contraceptive use by adolescents (Manlove et al., 2006). Studies have shown that religion influence access to and use of contraceptives, with adolescents who are either religious, come from highly religious homes and communities are less likely to use contraceptives (Williamson et al., 2009).

2.8. Access to Information

Peer pressure is a significant aspect of normal adolescent growth, and it has been found to be a strong predictor of risk behaviors and possible psychosocial challenges (Santor, Messervey, & Kusumakar, 2000). At this age, peers influence contraceptive use in several ways by shaping norms, attitudes and values; and by providing a discussion and support group. Adolescents success in preventing pregnancy often rest on access to contraception information (Blanc et al., 2009). Adolescents frequently lack access to important information on contraception. Most of the information is secured from peers and often incorrect (Blanc et al., 2009).

Talking about sex in most African homes is a taboo, let alone discussing with children (Baku, 2014). Ideally, parents must be the main sex educators of adolescents since socialization is primarily initiated by them.

Lack of knowledge and the task of discussing sex with adolescents are often very difficult and feel ill- equipped to undertake the task by parents not to talk of introducing them to contraceptives. This is often associated with the belief that providing information will lead to sexual activities (Kane, 2007). In spite of the immense role parents' play in terms of communication and its adherence, many parents do not have the skill thereby leading to conflicts. A study done in the United States involving 513 adolescents aged between 12 to 17years showed parents to be the primary educators. The study found one-third (31%) of adolescents mentioning parents as key in decisions about sex (Albert, 2010).

The internet is an easily reachable medium for adolescents to get pornographic materials and adult oriented websites. A study by national survey of young people (10 -17years) who mostly use internet, 1 out of 4 adolescents had come across unwanted pornography and 1 out of 5 had been exposed to unwanted sexual approaches (Livingstone & Mason, 2015). Perception of mass media messages can be a central factor facilitating the effects of exposure and adolescents perception of television posts regarding the penalties of single motherhood or parenting (Carine, Janssens, & Hubert, 2002). The study found that for frequent soap opera viewers, marriages were seen to be unpleasant. Additionally, single mothers were seen to be "well-to-do" with an active social life. Researchers have repeatedly noted that the mass media have commonly portrayed a glamorized unrealistic portrayals of sex (Sarkar, 2016). Adolescents mostly emulate sexual behaviors when they are perceived not to suffer negative consequences.

2.9. Conclusion

The literature used literature from different scenarios and parts of the world to explore the contraceptive knowledge, use and health or facility related factors of adolescents. A study by Gyesaw and Ankomah (2013) on experiences of the pregnant teenage mothers in a suburb of

Accra identified several challenges of these new mothers. With emerging literature supporting the view that adolescents are handicapped by a multiple factors, it is necessary to note that this study seeks to assess the validity of some of these barriers and factors influencing use of contraceptives by adolescents in Sunyani – West District of Brong Ahafo region where adolescent pregnancy has increased from 458 (15.7%) in 2016 to 471 (16.7%) in 2017 (MoH-GHS DHIMS 2, 2018). This study further described the sexual activities and prevalence among the study population in order to develop recommendations that will safeguard the sexual health of Ghanaian adolescent.

CHAPTER THREE

METHODOLOGY

3.1 Introduction

This section explains 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 and structured questionnaires. “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 associated with use of contraceptives among adolescents.

3.3 Study Area

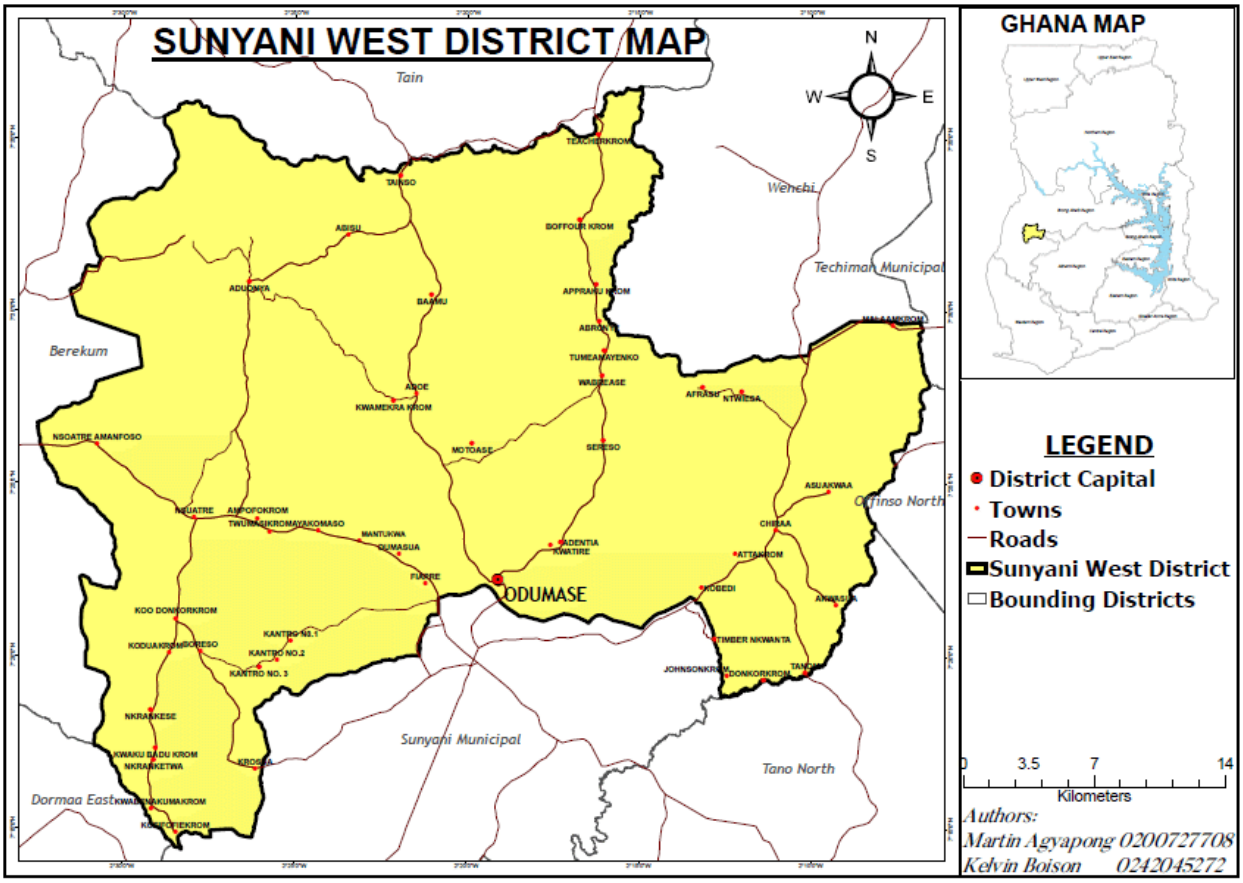

Figure 3.1 : Map of Sunyani –West District (Adapted from GSS, 2008)

The study was done in the Sunyani – West District of the Brong Ahafo Region of Ghana.

The Sunyani West District which was selected out of Sunyani East district now Sunyani Municipal, is one of the 27 districts in Brong Ahafo Region of the Republic of Ghana with Odomase as the administrative capital (Ghana Statistical Service et al., 2014).

Agriculture is the major activity of the people in Sunyani West District. All the major settlements in the District are connected to the national electricity grid. Only a few communities in the hinterland do not have access to electricity. In terms of social services to the people, the district has educational institutions for all the levels, namely sixty five kindergartens, sixty eight primary

schools, forty three basic schools, two technical/vocational schools, five senior high schools and two universities; Catholic University College of Ghana and University of Energy and Natural Resources (Ghana Statistical Service et al., 2014).

Health services are also provided from a mix of health facilities both public and private. Ranging from health centers, Community based Health Planning and Services Compounds (CHPS), clinics and maternity homes. The distribution of facilities: five health centres, one in each settlement namely; Fiapre, Chiraa, Nsoatre, Kwatire, and Boffourkrom; two private clinics at Odomase and Chiraa. Seven CHPS zones at Adoe and Dumasua; and three maternity homes at Nsoatre, Odomase and Dumasua (Ghana Statistical Service et al., 2014).

The population of Sunyani West District according to the 2010 Population and Housing Census is 85,272 representing 3.7% of the region's total population. Females constitute 51.5% and males represent 49.5%. About 71% (70.8) of the population reside in urban localities. The district has a sex ratio (number males per 100 females) of 94.3(Ghana Statistical Service et al., 2014). The youthful population (population less than 15 years) in the district account for 38.3% of the population(Ghana Statistical Service et al., 2014). The total age dependency ratio (dependent population to population in the working age) for the district was 74.9, the age dependency ratio for males was higher (77.5) than that of females (72.5). The Total Fertility Rate (TFR) for the District is 3.2. The General Fertility Rate (GFR) is 95.8 births per 1000 women aged 15-49 years which is the fourth highest for the region.

"The Crude Birth Rate (CBR) is 25.2 per 1000 population. The Crude Death Rate (CDR) for the district is 5.4 per 1000". "About four in ten (37.2 %) of the population aged 12 years and older are married, 43.0% have never married, 10.0% are in consensual unions, 4.0% are widowed, 4.3% are divorced and 1.4% are separated"(Ghana Statistical Service et al., 2014). About 8 out of 10 of the married population (83.9%)) are working, 2.9% not working and 13.2% are

economically inactive. A larger portion of those who have never married (62.3%) are economically not active with 5.6% unemployed (Ghana Statistical Service et al., 2014).

3.4. Data Analysis

Descriptive statistics described the factors associated with contraceptive use summarized in percentages, proportions and frequencies. Mean, median and standard deviation was calculated for age. Chi-square test was used to measure the association or relationship between the outcome variable (contraceptive use) and the explanatory variables. Regression analysis (logistic regression) was employed to assess the odds of the factors that are associated with use of contraceptives. Confidence interval of 95%, and $P<0.05$ (at 5% level of significance) was measured. Data entry and processing was done using Stata version 15 and SPSS (Statistical package for Social Sciences) version 23. SPSS was used for coding and exported for the final analysis in STATA. Open ended questions were grouped based on participants response.

3.5 Variables

Two key variables were measured in this study: outcome/dependent variable and independent variable.

3.5.1 Dependent Variable

The outcome variable for this study was Contraceptive Use (ever and current use).

3.5.2 Independent Variables

Age, educational status, Socio-economic status, Knowledge about contraceptives, perception of adolescents on contraceptive providers, access to information (peer influence, parent/child communication and mass media), Ethnicity and Religion.

3.6. Study Population

The study was conducted among adolescents (15 – 19) in Sunyani West district. A total of 267 adolescents participated in the study.

3.6.1. Inclusion criteria

Adolescents aged 15 to 19 years in Sunyani West District.

3.6.2 Exclusion criteria

Adolescents aged 10 and 14 years in Sunyani West District.

3.7 Sampling

3.7.1 Sample size calculation

Sample size calculation was done to define the minimum number of study units that can be studied.

The sample size for this study was determined considering the following factors:

1. Estimated population based on adolescents' contraceptive prevalence rate of 19% in Ghana as reported by the (Ghana Statistical Service et al., 2014).

2. 95% confidence level

3. Acceptable margin of error 5%. Based on the Cochrane formula, that is

$$n = \frac{Z^2 p (1 - p)}{d^2}$$

Where: n - minimum sample size required

d - Is margin of error 5%

z - Confidence level 95%

p - Estimated proportion of adolescents.

For the purpose of this study, 19% adolescent contraceptive prevalence rate for Ghana (Ghana Statistical Service et al., 2014) was used.

$$n = \frac{(1.96)^2 * 0.19(1 - 0.19)}{(0.052)^2}$$

$$n = \frac{3.8416 * 0.19 * 0.81}{0.0025}$$

$$n = \frac{3.8416 * 0.1539}{0.0025}$$

$$n = 236$$

An estimated 13% non – response (30.68 = 31) was added

Therefore n = 267

3.7.2 Sampling procedure

A multi-stage sampling was employed, size 267 using the Cochrane (1977) formula for the study. First, stratified sampling method was used to select five settlements. This was done by writing the names of all nineteen settlements in the district on a sheet of paper, grouping them under rural and urban settlements and randomly selecting three rural and two urban settlements. Secondly, houses were sampled proportionately to the size of each settlement. Thirdly, a systematic sampling technique was employed to select the required number of houses in each settlement.

The sample in each settlement was proportionate to the number of adolescents where the settlement with the highest adolescent population had more participants.

Finally, an adolescent aged 15-19 was sampled from each of the selected houses. Where the number of adolescents in any of the selected houses was more than one, a list was made of all adolescents who were willing to participate in the study and a simple random sampling technique used to pick only one. Where there were no adolescents aged 15-19 in any of the houses or where none was willing to take part in the study, such houses were replaced with the next house.

3.8 Data Collection Techniques/Methods & Tools

This is the process of gathering vital information in a systematic process by identifying the subjects and site with the research goal or hypothesis of the study (Burns and Grove 2007). Structured questionnaire was used to gather information from the participants on their knowledge, access to contraceptives and its use. The questionnaires comprised largely of closed-ended questions and a few open-ended questions which gave the adolescent the opportunity to answer the question in their own words. Four research assistants were employed in the distribution of questionnaire and data collection with the supervision of the principal investigator.

3.9 Ethical Consideration

Ethical clearance to conduct the study on Factors Influencing Contraceptive use among Adolescents (15-19years) in the Sunyani West District was obtained from the Ghana Health Service Ethical Review Committee with reference number GHS-ERC: 071/12/17. Informed written and verbal permission was also sorted from the Regional Director of Health Service (Brong Ahafo Region) and the Sunyani West Health Directorate. Informed written consent was

sought from all respondents voluntarily. Among adolescents who are below 18 years, informed written consent was sought from their parents or guardians. All respondents in such cases are required to comply with their parents' consent. Respondents were also guaranteed of confidentiality and anonymity where names of participants were neither written on questionnaires nor recorded in any write up. Although the participants may be exposed to the risk of spending time and the emotional or discomfort in answering certain sensitive questions, it was minimal and there are no direct incentives or compensations. Those who were affected were counseled and further directed to the appropriate authorities for the necessary attention and help. Respondents were urged to participate at their own will without conditions attached. And therefore, if at any point the participant wished to withdraw from the study, he or she was free to do so without any penalty or negative consequences. Indirect benefits will be the policy guidelines that will help minimize adolescent pregnancies, promote health and education in the Sunyani–West district and the nation at large. There was no conflict of interest in this study. Data collected was stored on a computer and password protected accessible only to the principal investigator and her supervisor. The findings of this study will be made available to the general public through conference presentations, seminars, and general awareness programs in collaboration with the media, government agencies and academic/research Institutions in print, electronic and audio forms. The research was solely funded by the principal investigator.

3.10 Quality control

Consideration was given to the objectives of the research when designing the data collection instrument. Data quality was ensured by carefully collecting data and managing where data collected each day was consistently checked to minimize human error.

3.11 Pre-testing

The questionnaire was pre-tested in Sunyani East District which has similar characteristic to Sunyani West District. Pretesting was done to **assess** the research questions and to determine if respondents clearly understood and able to answer them. Also to determine if questionnaire were able to cover the study objectives .Necessary modifications were effected before the actual study.

3.11 Study Limitation

The sensitive nature of the questions where adolescents were required to indicate the age of first sex, frequency, duration, whether or not they were using contraceptives and even the method used; the self-administration of the questionnaire affected responses given where some felt their faces would be seen on submitting the answered questionnaire. Some participants too felt they wrongly answered questions so would not submit with some even misplacing questionnaires where they were given new ones to complete them. This was minimized by assuring confidentiality, privacy and cross checking of completed questionnaires by interviewers before collection and assuring them no answer is neither right nor wrong and that each participants view was important to the study. Due to financial constraints, five out of the nineteen settlements in the district were selected which could not give a greater representation of the population in the district.

CHAPTER FOUR

RESULTS

4.1 Introduction

This chapter shows the results of the empirical study. It focused on the socio-demographic characteristics of the respondents, knowledge and awareness of contraceptive use of respondents. This chapter also examined the socio-demographic factors associated with contraceptive use and other factors that influenced contraceptive use among adolescents.

4.2. Socio-Demographic Characteristics of Respondents

A total of 267 adolescents participated in the study with the mean age of respondents = 17.1years (SD = +/- 1.19), minimum age = 15years and maximum age = 19years. The socio-demographic characteristics provide a clear understanding of the study participants. Data collected on their age, marital status, religion, educational level, and educational level of mother, father or guardian were analyzed. Table 4.1 shows a detailed presentation of the results.

Majority of the respondents 169 (63.30%) were within age group 15-17. Out of the total study participants, 204 (76.40) were females and 63 (23.60%) were males. Respondents who indicated they have had senior secondary education were 148 (55.43%), 78 (29.21%) indicated they have had junior secondary education, 27 (10.11%) respondents have had primary education, 11 (4.12%) have had no formal education and 3 (1.12%) have had tertiary education. Majority of the respondents 235 (88.01%) were Christians, 29 (10.86%) were Muslims and 3 (1.12%) were traditionalists. Respondents who were not married were 245 (92.11%), 10 (3.76%) were married, 6 (2.26%) were separated and 5 (1.88%) were co-habiting. In relation to educational status of mothers and fathers, 77 (28.84%) indicated their mothers had no formal education as compared to 53(19.85%) of the father, mothers primary education was 45 (16.85%) as compared to fathers

own of 41(15.36%), junior high education was 94 (35.21%) as compared to fathers own of 76 (28.46%). Senior secondary education was 42 (15.73%) of the mothers and 64 (23.46%) of fathers. Tertiary education among mothers was 9 (3.37%) and 33 (12.36%) was fathers. Most of the respondents 209 (78.28%) indicated they were living with parents, 36 (13.46%) with guardian, 7(2.62%) stayed with their partner and 15 (5.62%) were staying alone.

Table 4.1: Socio-demographic Characteristics of adolescents

Demographic factors	Frequency (267)	Percentage (%)
Age group		
15-17	169	63.30
18-19	98	36.70
Gender		
Female	204	76.40
Male	63	23.60
Educational level		
None	11	4.12
Primary	27	10.11
JHS	78	29.21
Secondary	148	55.43
Tertiary	3	1.12
Religious affiliation		
Christianity	235	88.01
Islamic	29	10.86
Traditional	3	1.12
Marital status		
Not married	246	92.11
Married	10	3.76
Separated	6	2.26
Co-habitation	5	1.88
Educational level of mother		
None	77	28.84
Primary	45	16.85
JHS	94	35.21
Secondary	42	15.73
Tertiary	9	3.37
Educational level of father		
None	53	19.85
Primary	41	15.36
JHS	76	28.46
Secondary	64	23.46
Tertiary	33	12.36
Living arrangement		
Parents	209	78.28
Guardian	36	13.48
Partner	7	2.62
Nobody	15	5.62

4.3 Current Contraceptive Method(s) used

Figure 4.1 shows the current method usage by adolescents. Majority (54.3%) of the respondents indicated they were not on any method, 15.7% were using male condoms, 15.2% pills, 4.5% were using female condom, 3.6% were on implants, 0.4% used lactation amenorrhea and IUD was 0.4%.

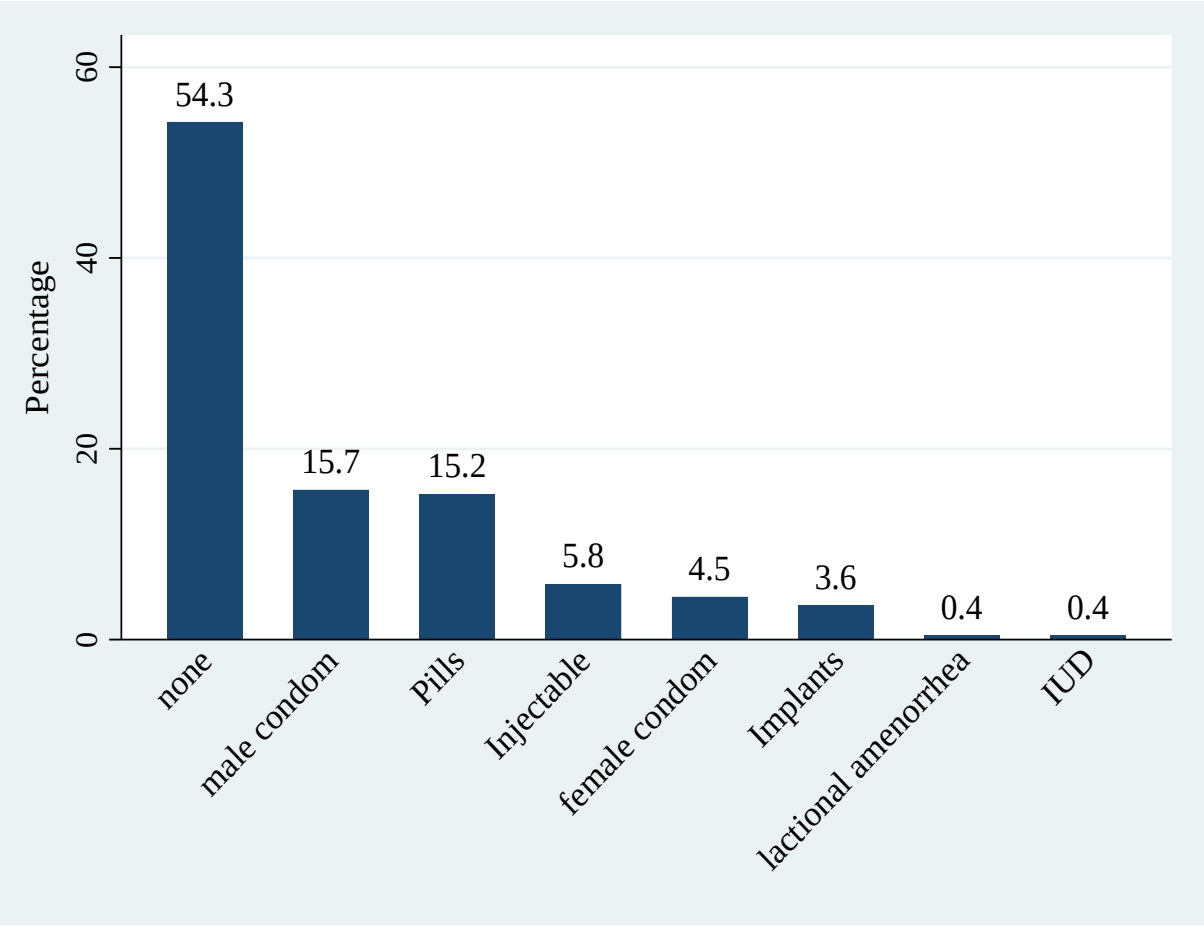

Figure 4.1: Current contraceptive methods used by study participants

4.4 Adolescent Source of Contraceptive Information

Figure 4.2 shows the source of contraceptive information among adolescents. 36.2% indicated they had the information from health workers followed by 23.6% from radio, 17.5% from teachers, 15.9% from friends, 3.7% from family members, 2.0% from partners and 1.2% from print media.

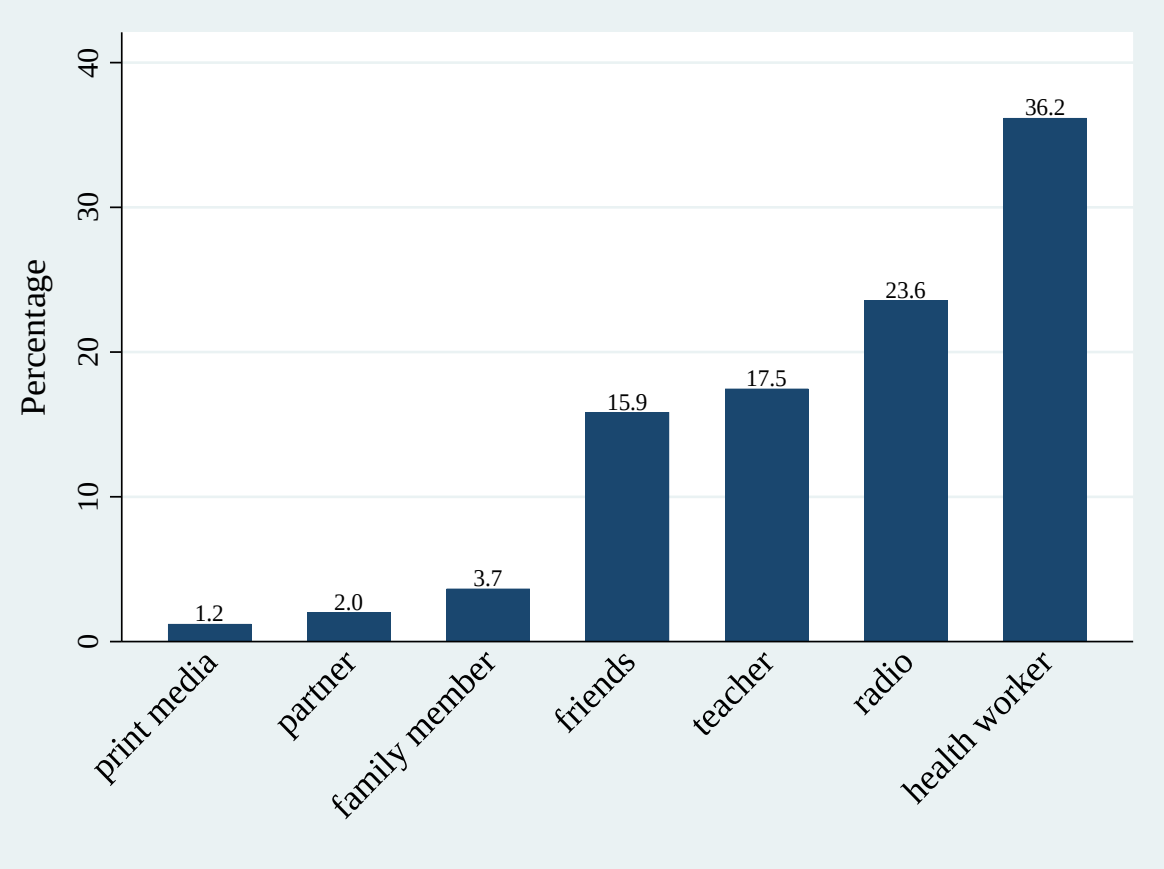

Figure 4.2: Adolescents' source of contraceptive information

4.5 Reasons for Using Contraceptives

The main objective of this study was to determine the factors that influence contraceptive use among adolescents in the Sunyani-West District. Out of the study participants, majority (71.7%) indicated they would either use or are using contraceptives to prevent pregnancy. This was followed by (21.1%) who indicated they would use contraceptives to prevent sexually transmitted infections and (7.2%) would use contraceptives to delay childbirth.

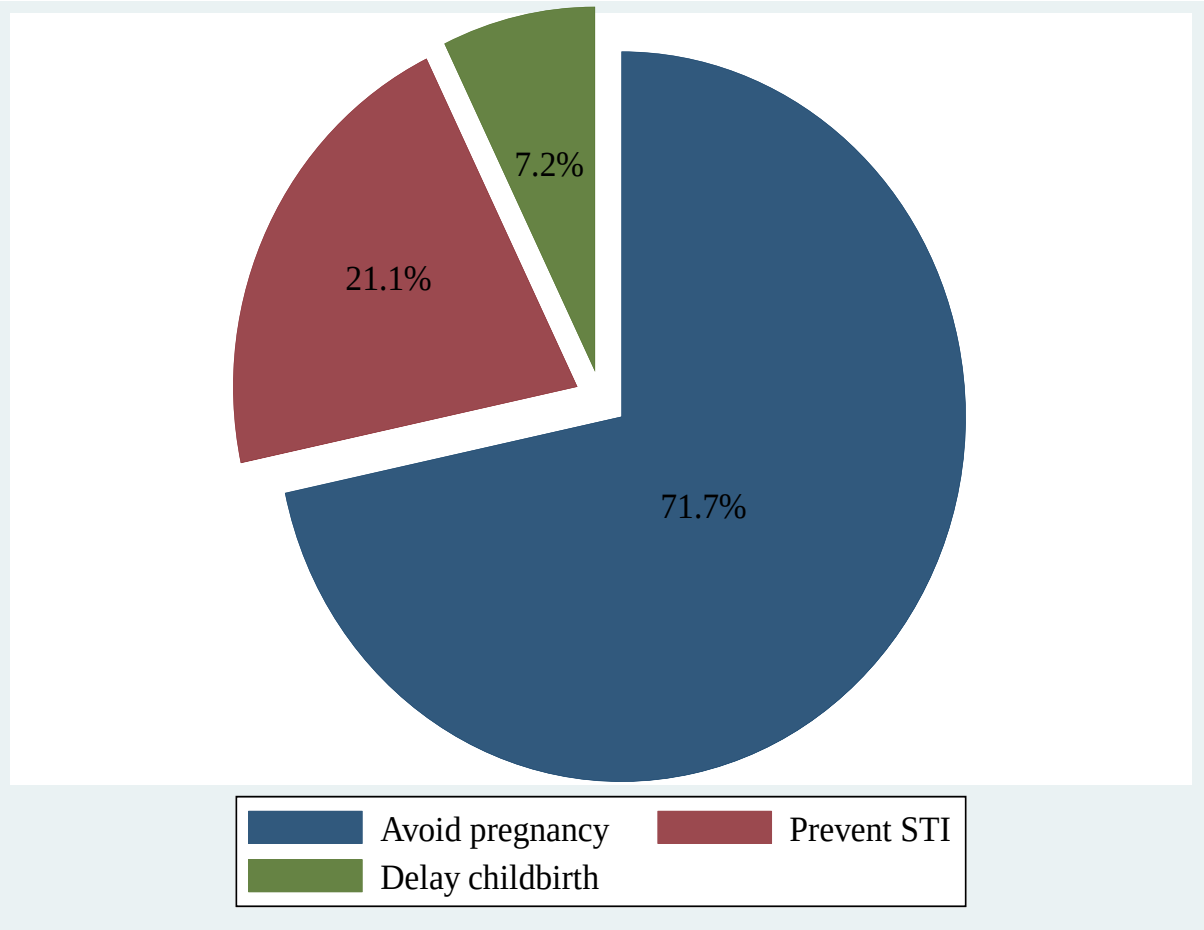

Figure 4.3: Reasons for using contraceptives

4.6 Decision Maker when Contraceptive was used

Figure 4.4 shows decision making abilities when contraceptive was used last time. Majority (38.9%) decided on their own without any influence from others to use contraceptive; this was followed by friend (33.1%), partner (20.1%) and parent/ family accounted to 7.9%

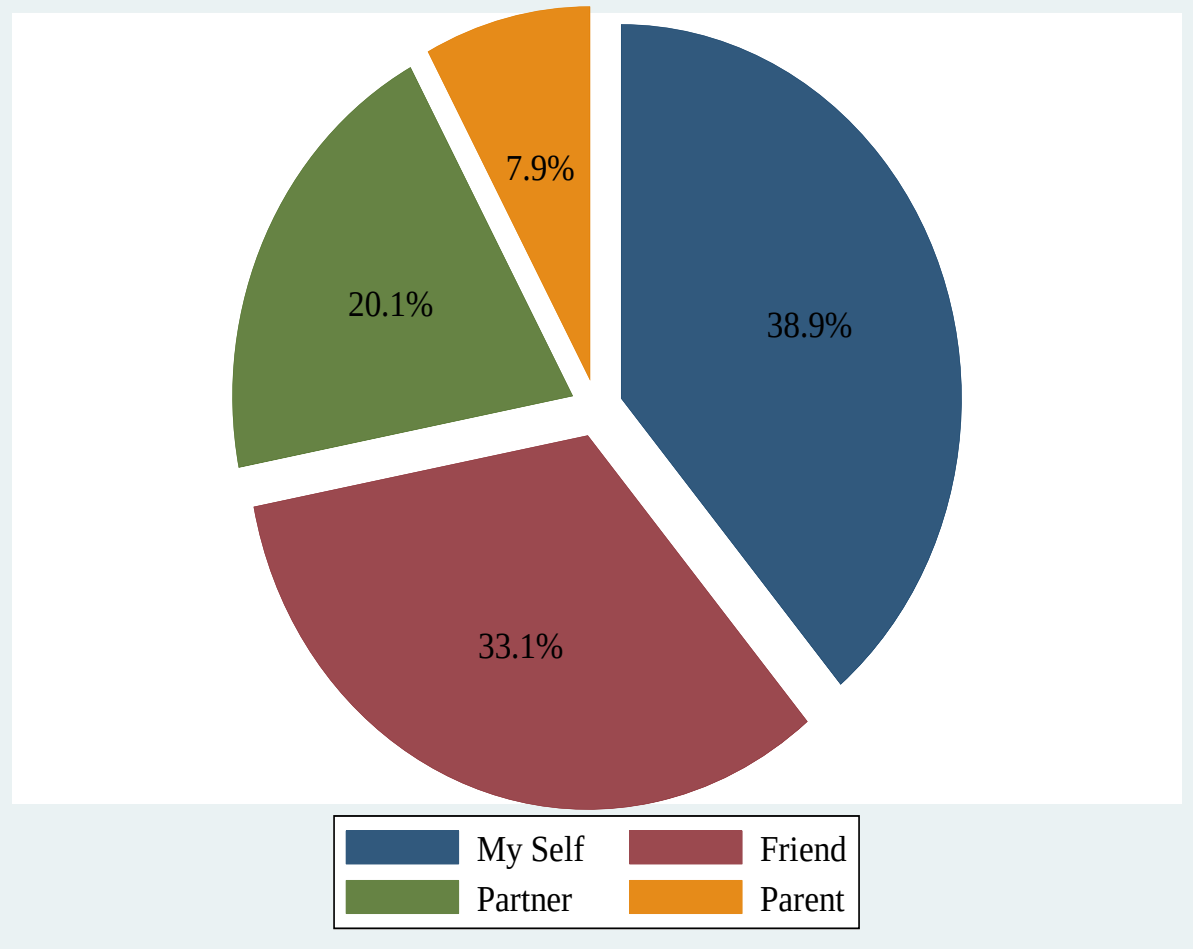

Figure 4.4: Decision maker last time contraceptive was used

4.7 Reasons as perceived by adolescents why they do not use contraceptive

The major reason respondents attributed to non-usage of contraceptive was attitude of service providers (20.1%), followed by religious beliefs (15.1%), too costly (11.6%), opposition from partner or relative (11.3%), distance to contraceptive acquisition (9.3%), side effects (7.6%), cultural beliefs (7.2%), lack of preferred method (4.9%), lack of knowledge (4.5%) and lack of counselling (4.4%). This is shown in Fig. 4.5

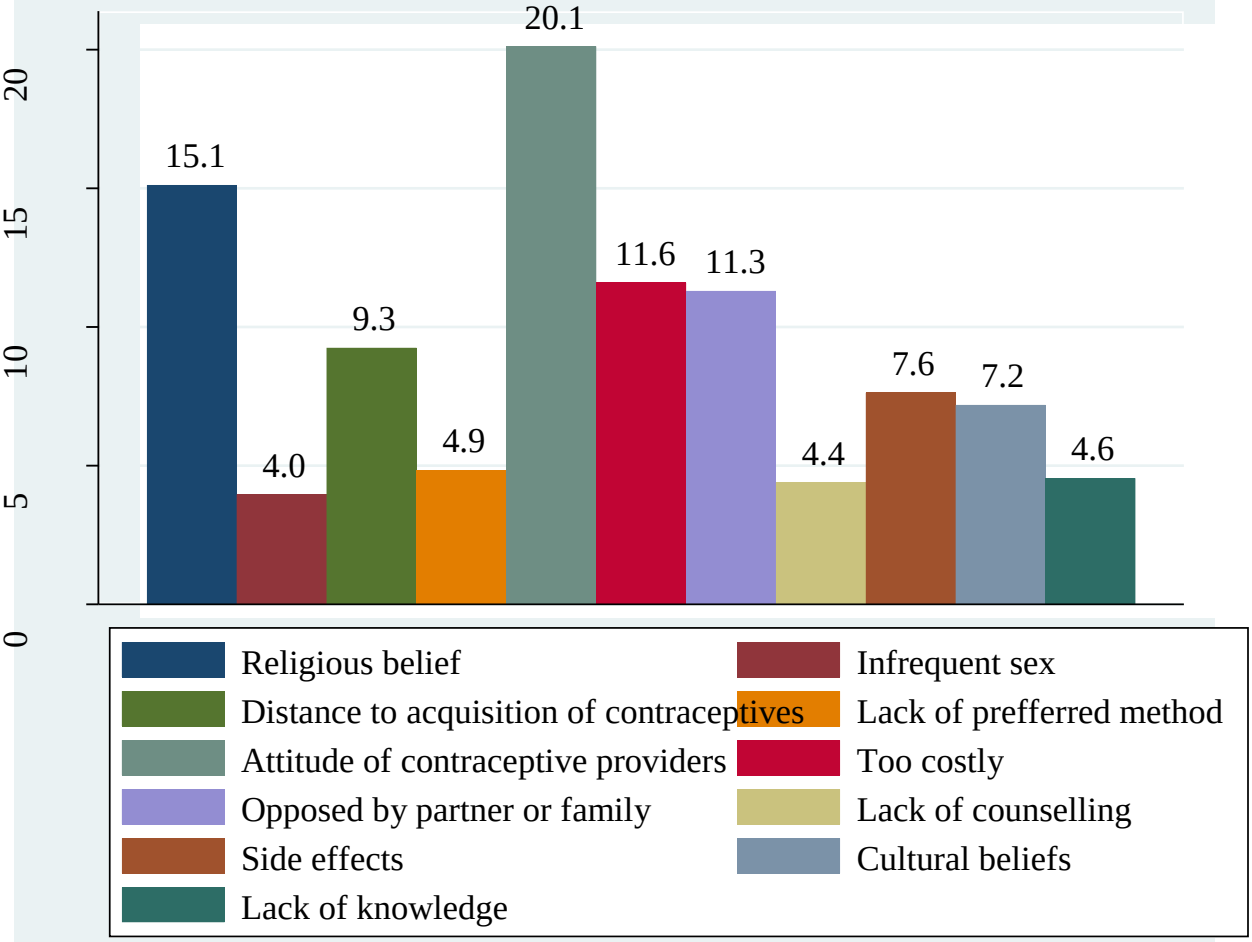

Figure 4.5: Reasons as perceived by adolescents why they do not use contraceptives

4.8 Knowledge and awareness of contraceptives

Table 4.2 focused on respondents' knowledge and awareness on contraceptives. Participants who had heard of contraceptives' were 246 (92.13%). Those who indicated they knew about contraceptive methods were 238 (89.14%) and 29 (10.86%) do not know of any method. With regards to where to acquire contraceptives, 213 (79.78%) indicated they knew where to get it whiles 54 (20.22%) did not know where to get it from with 119 (55.87%) indicating that it can be acquired from the hospital, 88 (41.31%) from the pharmacy or drug store and 6 (2.82%) from friends. Those who indicated it is used to prevent pregnancy were 235 (88.01%) whiles 15 (5.62%) indicating contraceptive is not used to prevent pregnancy and 17(6.37%) did not even know what contraceptive is used for. Adolescents who indicated pregnancy can result from unprotected sex were 251 (94.01%) with 10 (3.75%) indicating no and 6 (2.25%) did not know at all. With regards to contraceptive providing 100% pregnancy protection, 78(29.21%) showed yes, 154 (57%) no and 35 (13.11%) did not know. Adolescents who indicated contraceptive is a woman's business were 196(73.41%). When it comes to people who should use contraceptives, 52 (19.48%) showed only married couples should use, 166 (62.17%) showed it should only be used by sexually active persons and 49(18.35%) said it should only be used by adults.

Table 4.2: Participants knowledge on contraceptives

Variable	Frequency (267)	Percentage (%)
Heard of contraceptives		
No	21	7.87
Yes	246	92.13
Heard of contraceptive methods		
No	29	10.86
Yes	238	89.14
Know where to get contraceptive		
No	54	20.22
Yes	213	79.78
Place to get contraceptives		
Hospital	119	55.87
Pharmacy/drug store	88	41.31
Friend	6	2.82
Contraceptive is used to prevent pregnancy		
No	15	5.62
Yes	235	88.01
Don't know	17	6.37
Pregnancy can result from unprotected sex		
No	10	3.75
Yes	251	94.01
Don't know	6	2.25
Contraceptives provide 100% pregnancy protection		
No	154	57
Yes	78	29.21
Don't know	35	13.11
Contraceptive is a woman's business		
No	196	73.41
Yes	71	26.59
People who should use contraceptive		
Married couples	52	19.48
Sexually active persons	166	62.17
Adults only	49	18.35

4.9 Adolescents use of contraceptive

Table 4.3 shows contraceptive use among adolescents. More than half of the study participants (58.05%) indicated contraceptive use does not promotes promiscuity while (41.95%) showed that it promotes promiscuity. For those who used contraceptive at first sex, (55.88%) showed they did not use, (24.02%) reported yes and (20.10%) indicated not applicable. For duration of contraceptive use, (49.47%) indicated they have been using contraceptive in less than a year, (30.53%) showed they used contraceptive for 1-2years, (12.63%) reported usage for 3-5years and 7.37% reported usage for 6-10years. With regards to the frequency of contraceptive use, (13.48%) reported every time usage, (39.33%) indicated usage in once a while and (47.19%) reported not using at all. For reasons to using contraceptives by adolescents, (71.65%) indicated it is used to prevent pregnancy, (21.13%) reported it is used to prevent sexually transmitted infections. More than half (62.17%) indicated they have not used contraceptive recently and (37.83%) showed they have. When it comes to influence in contraceptive usage, (38.85%) reported nobody, (33.09%) showed friends influenced, (20.14%) reported partner influence and (7.91%) indicated parents influence. Current contraceptive use is 37.8%; 95% CI = (32.2 – 43.8).

Table 4.3: Adolescents use of contraceptives

Variable	Frequency	Percentage (%)
Contraceptive use promote promiscuity		
No	155	58.05
Yes	112	41.95
Used contraceptive during first sex		
No	114	55.88
Yes	49	24.02
Not applicable	41	20.10
Used contraceptive before		
No	163	66.80
Yes	81	33.20
Duration of contraceptive use		
< 1 year	47	49.47
1-2 years	29	30.53
3-5 years	12	12.63
6-10 years	7	7.37
Frequency of contraceptive use		
Every time	24	13.48
Once a while	70	39.33
Not at all	84	47.19
Reasons for using contraceptive		
Avoid pregnancy	139	71.65
Prevent STI's	41	21.13
Delay childbirth	14	7.22
Recently used contraceptive		
No	166	62.17
Yes	101	37.83
Don't know		
Influence on the use of contraceptive		
Nobody	54	38.85
Friend	46	33.09
Partner	28	20.14
Parent	11	7.91

4.10 Socio-demographic factors and use of contraceptive

The study found no significant association between socio-demographic factors of respondents and contraceptive use in a chi-square test done at 95% confidence interval as presented in Table 4.4.

Table 4.4 Association between demographic factors and use of contraceptive

Variable	No	Yes	Chi2	p-value
Age group			1.67	0.197
15-17	110 (65.09%)	59 (34.91%)		
18-19	56 (57.14%)	42 (42.86%)		
Gender			0.89	0.346
Female	130 (63.73%)	74 (36.27%)		
Male	36 (57.14%)	27 (42.86%)		
Educational level			2.19	0.668
None	6 (54.55%)	5 (45.45%)		
Primary	14 (51.85%)	13 (48.15%)		
JHS	52 (66.67%)	26 (33.33%)		
Secondary	92 (62.16%)	56 (37.84%)		
Tertiary	2 (66.67%)	1 (33.33%)		
Religious affiliation			4.99	0.066
Christianity	142 (60.43%)	93 (39.57%)		
Islamic	23 (79.31%)	6 (20.69%)		
Traditional	1 (33.33%)	2 (66.67%)		
Marital status			1.73	0.596
Not married	154 (62.86%)	91 (37.14%)		
Married	7 (70.00%)	3 (30.00%)		
Separated	3 (50.50%)	3 (50.50%)		
Co-habitation	2 (40.00%)	3 (60.00%)		
Educational level of mother			1.64	0.824
None	46 (59.74%)	31 (40.26%)		
Primary	27 (60.00%)	18 (40.00%)		
JHS	61 (64.89%)	33 (35.11%)		
Secondary	25 (59.52%)	17 (40.48%)		
Tertiary	7 (77.78%)	2 (22.22%)		
Educational level of father			0.64	0.958
None	35 (66.04%)	18 (33.96%)		
Primary	24 (58.54%)	17 (41.46%)		
JHS	47 (61.84%)	29 (38.16%)		
Secondary	39 (60.94%)	25 (39.06%)		
Tertiary	21 (63.64%)	12 (36.36%)		
Living arrangement			4.75	0.192
Parents	133 (63.64%)	76 (36.36%)		
Guardian	24 (66.67%)	12 (33.33%)		
Partner	3 (42.86%)	4 (57.14%)		
Alone	6 (40.00%)	9 (60.00%)		

4.11 Other factors and use of contraceptives

In addition to the socio-demographic factors, there was a significant difference between other factors and contraceptive use as shown in table 4.5. The bivariate analysis indicates that there was statistically significant difference between having sex education at school among adolescents who used contraceptive and those who did not (Chi 2 = 4.61; p-value = 0.032). For those who had sex education at school and used contraceptive (41.62%) as against those who used contraceptives and did not use contraceptive (58.38%). With regard to those who did not have sex education in school, (27.14%) used contraceptive as against (72.86%) who did not use contraceptive. There was a significant difference with sexual partner (Chi 2 = 29.47; p- value = < 0.000) among contraceptive users and non-users. For those who reported having a sexual partner and using contraceptive (55.93%) against those having sexual partner and not using contraceptive (44.07%). There was a statistically significant difference between those who have ever had sex (Chi 2 = 26.0; p- value = < 0.000) and among contraceptive users and non-users between not having sex and not using contraceptive. For those who are having sex and not using contraceptives (46.51%) as against those having sex and using contraceptives (53.49%).There was a statistical difference between duration among adolescents who used contraceptives and those who did not (Chi 2 = 11.2; p-value = 0.013). For duration less than a year, (63.83%) indicated contraceptive use as against (36.17%) who did not use contraceptive. For duration of 1-2years, (79.31%) indicated using contraceptive as against (20.69%) who did not use. For duration of 3-5years, (75.00%) as against (25.00%) who indicated not using contraceptive. For duration of 6-10years, (14.29%) adolescents indicated using contraceptive as against (85.71%) who did not use contraceptive.

There was a statistically significant difference between frequency of contraceptive use (Chi 2 = 63.8; p- value= < 0.000) among contraceptive users and non-users. Under the frequency of contraceptive use, majority of the respondents (91.67%) who use it every time reported

contraceptive use as against (8.33%) who did not use contraceptive. For those who use it once a while reported not using contraceptive (41.43%) as against (58.57%) who are using contraceptive. Regarding not using at all (88.10%) reported not using contraceptive as compared to (11.90%) who are using contraceptive. There was a statistical difference among influence on use of contraceptive between those who use contraceptives and those who do not (Chi 2=11.13; p-value = 0.010). For adolescents who reported nobody influence, (66.67%) reported using contraceptive as against (33.33%) who did not use contraceptive. For those who reported being influenced by friends, (36.96%) reported using contraceptives and (63.04%) reported not using contraceptive. For those who were influenced by partners, (67.86%) reported using contraceptive as against (32.14%) who did not use contraceptive. For those who reported being influenced by parents (45.45%) indicated using contraceptive as against (54.55%) who indicated not using contraceptive.

Table 4.5 Association between other factors and use of contraceptive

Variable	No	Yes	Chi2	p-value
Sex education at school			4.61	**0.032**
No	51 (72.86%)	19 (27.14%)		
Yes	115 (58.38%)	82 (41.62%)		
Sex education at home			1.38	0.241
No	54 (57.45%)	40 (42.55%)		
Yes	112 (64.74%)	61 (35.26%)		
Have sexual partner			29.47	**< 0.000**
No	114 (75.51%)	35 (23.49%)		
Yes	52 (44.07%)	66 (55.93%)		
Pressure to have unprotected sex			3.65	0.056
No	122 (65.95%)	63 (34.05%)		
Yes	44 (53.66%)	38 (46.34%)		
Had sex before			26.0	**< 0.000**
No	106 (76.81%)	32 (23.19%)		
Yes	60 (46.51%)	69 (53.49%)		
Age of first sex			1.53	0.525
10-14	13 (52.00%)	12 (48.00%)		
15-17	47 (49.47%)	48 (50.53%)		
18-19	3 (30.00%)	7 (70.00%)		
Duration of contraceptive use			11.2	**0.013**
< 1 year	17 (36.17%)	30 (63.83%)		
1-2 years	6 (20.69%)	23 (79.31%)		
3-5 years	3 (25.00%)	9 (75.00%)		
6-10 years	6 (85.71%)	1 (14.29%)		
Frequency of contraceptive use			63.8	**< 0.000**
Every time	2 (8.33%)	22 (91.67%)		
Once a while	29 (41.43%)	41 (58.57%)		
Not at all	74 (88.10%)	10 (11.90%)		
Reasons for using contraceptive			3.66	0.161
Avoid pregnancy	84 (60.43%)	55 (39.57%)		
Prevent STI's	19 (46.34%)	22 (53.66%)		
Delay childbirth	10 (71.43%)	4 (28.57%)		
Influence on the use of contraceptive			11.3	**0.010**
Nobody	18 (33.33%)	36 (66.67%)		
Friend	29 (63.04%)	17 (36.96%)		
Partner	9 (32.14%)	19 (67.86%)		
Parent	6 (54.55%)	5 (45.45%)		

4.12 Logistic regression on factors that influence contraceptive use among adolescents.

A total of 10 factors were found to be associated with use of contraceptives. To investigate the strength of significance and association, a logistic regression was done and the results shown in Table 4.6

To analyze the strength of association between socio-demographic factors and other factors that influence use of contraceptives, it was noticed that adolescents who were aged between 18-19years were at an increased odds of using contraceptives as compare to those aged 15-17years (OR =1.39, 95% CI = 0.83 – 2.33) as shown in table 4.6. Adolescents males were found to be to have an increased odds of using contraceptives as compared to their female counterparts (OR = 1.32, 95% CI = 0.74 – 2.34). The odds of being a traditionalist and using contraceptive is greater (OR=3.05, 95% CI = 0.27 – 34.16) as compared to a reduced odd by their Islamic (OR=0.40, 95% CI = 0.16 – 1.02) counterparts. Per the living status, those who lived alone had an increased odd (OR=2.63, 95% CI = 0.90 – 7.66) of using contraceptive as compared to those living with partner (OR=2.33, 95% CI= 0.51- 10.70) and guardian (OR= 0.88; 95% CI = 0.41-1.85). Those who responded yes of having sex education in school had an increased odds (OR= 1.91; 95% CI = 1.05- 3.48) of using contraceptive as compared to those who responded no.

Having a sexual partner comes with an increased odd of using contraceptive (OR= 4.13; 95% CI = 2.45 – 7.0) as compared to those without. Those who have also had sex before have an increased odd (OR= 3.81; 95% CI = 2.25 – 6.44) of using contraceptive as compared to those who have not. With regards to duration of contraceptive use, those who have used within one to two years have an increased odds using contraceptives (OR= 2.17; 95% CI= 0.74 – 6.28) as compared to those who have used from 3-5years (OR= 1.70; 95% CI =) and 6- 10years (OR= 0.09; 95% CI = 0.01 – 0.85). For frequency of contraceptive use, those who used it

once a while have a reduced odds (OR =0.13; 95% CI = 0.03 – 0.51) as compared to those who do not use at all (OR =0.01; 95% CI = 0.00 – 0.06). Partner influence on contraceptive use has an increased odds (OR=1.06; 95% CI = 0.40 – 2.80) as against a reduced odd from friends (OR =0.42; 95% CI = 0.11-1.55) and parent/family (OR= 0.29; 95% CI = 0.13 – 0.65).

Table 4.6 Adjusted and unadjusted binary logistic regression analysis showing factors determining the current use of contraceptives by adolescent.

Variable	Crude		Adjusted	
	OR	95% CI (p-value)	OR	95% CI (p-value)
Age group				
15-17	1		1	
18-19	1.39	0.83 – 2.33 (0.198)	0.28	0.05 – 1.61 (0.154)
Gender				
Female	1		1	
Male	1.32	0.74 -2.34 (0.347)	3.66	0.65 – 20.46 (0.139)
Religious affiliation				
Christianity	1		1	
Islamic	0.40	0.16 – 1.02 (0.054)	1.31	0.12 -14.85 (0.825)
Traditional	3.05	0.27 – 34.16 (0.365)		
Living arrangement				
Parents	1		1	
Guardian	0.88	0.41 – 1.85 (0.726)	7.76	0.74 – 80.90 (0.087)
Partner	2.33	0.51 – 10.70 (0.276)	0.41	0.01 – 13.68 (0.615)
Alone	2.63	0.90 – 7.66 (0.077)	8.00	0.46 – 139.25 (0.154)
Sex education at school				
No	1		1	
Yes	1.91	1.05 – 3.48 (0.033)	5.00	0.91 – 27.57 (0.064)
Have sexual partner				
No	1		1	
Yes	4.13	2.45 – 7.00 (< 0.000)	8.89	**1.65 – 47.79 (0.011)**
Had sex before				
No	1		1	
Yes	3.81	2.25 – 6.44 (< 0.000)	1.95	0.33 – 11.50 (0.460)
Duration of contraceptive use				
< 1 year	1		1	
1-2 years	2.17	0.74 – 6.38 (0.158)	4.45	0.88 – 22.59 (0.071)
3-5 years	1.70	0.40 – 7.14 (0.469)	35.50	**1.60 – 788.70 (0.024)**
6-10 years	0.09	0.01 – 0.85 (0.035)	0.11	0.01 – 1.86 (0.125)
Frequency of contraceptive use				
Every time	1		1	
Once a while	0.13	0.03 – 0.59 (0.008)	0.08	**0.01 – 0.86 (0.038)**
Not at all	0.01	0.00 – 0.06 (< 0.000)	0.11	0.01 – 2.37 (0.159)
Influence on contraceptive usage				
Nobody	1		1	
Friend	0.42	0.11 – 1.55 (0.192)	0.53	**0.04 – 8.01 (0.647)**
Partner	1.06	0.40 – 2.80 (0.913)	1.39	0.12 – 15.54 (0.791)
Parent	0.29	0.13 – 0.67 (0.004)	0.56	0.03 – 8.99(0.049)

CHAPTER FIVE

DISCUSSION OF FINDINGS

5.1 Introduction

This chapter showed the findings of the study in relation to other studies that have been identified in the subject of contraceptive use with the view of finding the similarities, disparities and fill gap in the literature.

5.2 Socio-demographic characteristics

The study participants comprised of adolescents aged 15 – 19years in the Sunyani – West District. Majority of the participants were females 204(76.40%) and 63(23.60%) were males with males (42.86%) using more contraceptives than their female counterparts (36.27%). Knowledge and awareness was high 246 (92.13%) but use of contraceptive was low 81 (45.6%). For those who have heard about it, 36.2% reported they heard from health workers, 23. 6% from radio, 17.5% from teacher, 15.9% from friends, 3.7% from family member, 2.0% from partner and 1.2% from print media. With regards to the living status of the adolescents, those who lived alone were using contraceptives more (60.0%) than those living with parents or guardian. On the issue of contraceptive use at first sex, 49 (24.02%) indicated yes, 114 (55.88%) reported no and 41(20.10%) not applicable. On current contraceptive method used by study participants, male condom was highest (15.7%), followed by pills (15.2%) with lactational amenorrhea and IUD being lowest (0.4%) whiles (54.3%) were not on any method. Additionally, reason for contraceptive use included (71.7%) to avoid pregnancy, (21.1%) to prevent sexually transmitted infections and (7.2%) to delay childbirth.

In the relation to reasons perceived by adolescents why they do not use contraceptive, majority (20.1%) indicated staff attitude, followed by religious beliefs (15.1%) and lowest (4.0%) being infrequent sex. The study further on found a significant association between

contraceptive use and other factors such as sex education at school, having a sexual partner, had sex before, duration and frequency of sex and influence on contraceptive use.

5.3 Consistency with other research

In other studies it was revealed that older adolescents were more likely to practice contraception as compared to younger ones (Nyarko, 2015), this is reflected in this study which shows that a proportion of the adolescents aged 15-17 years responded that they were using contraceptives (34.91%) as against those aged 18-19years (42.86%). Also, even though sex education at schools (58.38%) and homes (64.74%) were high, it did not translate to use of contraceptives as majority of the adolescents were not on any method (54.3%). This is evident in Ojikutu and Adeleke (2010) who published in a study among Nigerian adolescents. But this was not consistent with a study done by Khan et al., (2008) who established that adolescents who are educated and especially in sexuality issues are more likely to use contraceptives as compared to their uneducated adolescents even though knowledge of at least one method is universal. The study also found an association between having sexual partner and frequency of sex (p-value = <0.000) which established that having sexual partner (55.93%) increases the chances of using contraceptives by the adolescent. This is in consistent with a research by Joyce (2011) on contraceptive use among adolescents indicating that having a sexual partner and effective communication increases the adolescent chances of contraceptive use (77.2%). The study established that nobody influenced the adolescent on contraceptive use (66.67%) and though they wish to use contraceptives, the adolescent perception of the risk of pregnancy may influence the choice of correct and effective method and its usage or not. The study also identified that majority (20.1%) of the respondents perceived that they were not using contraceptive due to poor attitude of provider staff as this is in consistent with a study by Godia, et al., (2013) indicating that reproductive services were

insufficient and inaccessible by adolescents due to poor attitude of care givers, unavailability and unaffordability.

5.4 Explanation of findings and implications

Despite a high knowledge level (92.13%) on contraceptives which could be attributed to information on contraception and family planning especially through the media, teachers, friends and relatives (GDHS, 2014) utilization is low though adolescents are engaging in risky sexual behaviours which can predispose them to unwanted pregnancies and STI / HIV. The male condom (15.7%) and pill (15.2%) were the most used by respondents in this study and so acquisition and effective use of contraceptive is key.

The main source of contraceptive information among adolescents per this study was from health workers (36.2%) followed by radio (23.6%), teachers (17.5%), friends (15.9%), family (3.7%), partner (2.0%) and print media (1.2%). These channels should be widely used to disseminate information which means that access to contraceptive information and effective utilization can lead to reduction in unwanted pregnancies and its associated consequences (Gomes, 2008)

In this study, older adolescents (18 – 19years) were at increased odds of using contraceptives as this can be as a result of increasing knowledge, maturity and likelihood of working as compared to the younger ones. Majority of adolescents living alone (60.0%) were also using contraceptives more than those living with parents or guardian.

The study also found that attitude of contraceptive providers was a major factor as perceived by the adolescent why they do not use contraceptives with some of the reasons being that they shout, judge and to some extent even report them to their parents or guardians.

5.5 Strengths and limitations of the study

The study involved adolescents of both sexes and has given some insight and understanding to an extent the factors that promote contraceptive use by the adolescents which may influence policies and interventions on sexual and reproductive health. The study however has some limitations due to the cross sectional study with some of the variables measured retrospectively. The study may to an extent suffer from recall bias since. Also the study was conducted in some five selected communities (two urban and three rural settlements) out of the nineteen settlements and so may not represent the general view of all the adolescents in the Sunyani- West district.

CHAPTER SIX

CONCLUSION AND RECOMMENDATIONS

6.1 Conclusion

This chapter shows the conclusions and recommendations based on the findings. The main objective was to determine the factors that influence contraceptive use by adolescents in the Sunyani –West district. Although the study found no significant association between demographic factors and contraceptive use, other factors such as sex education at school, having a sexual partner, had sex before, duration and frequency of sex and influence on sex were significant. From this study, it can be concluded that even though knowledge level was high among adolescents, contraceptive utilization was low.

6.2 Recommendations

On the basis of this study, these recommendations are made to help address issues that hinder utilization but promote effective use of contraceptives among adolescents.

Firstly, since the study indicated a high knowledge level but low prevalence, the Ghana Health service in partnership with the Ghana education service and other stakeholders should collaborate in providing adolescent friendly health services as well as training of service providers on the various methods to encourage easy accessibility and acceptability by adolescents and not shy them away. Service providers should encourage education and patronage of the intra-uterine device (IUD) since it's long acting and can be taken out by a health provider when the adolescent wish to get pregnant and also was least patronised (0.4%) in this study.

Secondly, education on reproductive health issues should be intensified targeting adolescents in schools especially when it's a taboo to discuss such issues at home and homes to prevent

them from seeking information from peers who may be least resourced. Even though knowledge level is high, there is the need to ensure education is coupled with adequate understanding on reproductive health issues especially on contraceptives to promote its effective usage. The girl child should also be empowered since they are the worst affected when it comes to consequences of risky sexual activities. Also there should be the involvement of males in reproductive health issues to minimize the burden of adolescent pregnancies.

Thirdly, the ministry of health should promote use of the dual protection (condoms) for the prevention of both STI and unwanted pregnancies since the adolescent HIV in the Sunyani – West district has increased from 2 in 2017 (one male, one female) to 31 in 2018 (one male, thirty females) (MoH- GHS, DHIMS 2, 2018). Again, massive education on the lactational amenorrhea method should be encouraged and intensified since it's cheap and easy to practice.

Lastly, health education and other interventions must be directed towards the adolescents to prevent risky sexual activities which can lead to unwanted pregnancies and STI/HIV by promoting easy accessibility and effective use of contraceptive.

6.3 Future Research

There is the need to conduct further and future research to translate knowledge to action especially on adolescent contraceptive utilization.

Also, further research can be done to explore the reasons behind responses given by adolescents in other to understand how this could influence their behaviour towards contraceptive use, using qualitative method since this study employed quantitative method.

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APPENDICES

APPENDIX 1: CONSENT FORM

Proposal Title: "Factors Influencing Contraceptive Use among Adolescents in the Sunyani West District, Brong Ahafo.

Principal Investigator: Jane Akasi Cobbold

Contact of Principal Investigator: gifty_cobbold@yahoo.com, 0540424966.

Institution of Affiliation: Department of Population, Family and Reproductive Health; School of Public Health, University of Ghana.

General information about the Research:

This research aims to determine the Factors Influencing Contraceptive Use among Adolescents (15 – 19 years) in Sunyani West District**;**

The purpose of this study is to determine the factors of contraceptives use among adolescents.

You are randomly selected to participate in the study, of which if you agree may take between 10-20 minutes to complete the questionnaire.

Possible Risk and Discomfort

The risk involved in taking part in this study is minimal. These include the time you will spend answering the questions. Some of the questions may be slightly personal and sensitive. However you have the choice to decline any question you are not comfortable with.

Possible Benefits

There are no direct benefits for participation in the study as well as no compensation for participation. However, the information that will be obtained from this study will help immensely in improving contraceptive use and minimizing unwanted adolescent pregnancies.

Voluntary Participation

Your participation in the study is entirely voluntary. The interview will take between 10-20 minutes to answer the question if you agree to participate. You have the choice however, to refuse any question you are not comfortable with, or even withdraw your consent to participate in the study. Your decision to resign in the study will not come with any penalty, loss of benefits or any negative consequences.

INFORMED WRITTEN CONSENT FOR PARENT/GUARDIAN

I would be much appreciative if you could endorse this document on behalf of your child/ward. This is to enable me carry out a study on the "Factors Influencing Contraceptive Use among Adolescents in Sunyani West District. The findings of this study will help develop specific evidence-based strategies aimed at reducing unwanted adolescent pregnancies; educate adolescents on contraceptives and its correct usage.

Responses will be completely anonymous and confidential. Your child/ward will be asked some series of questions on cervical cancer and screening knowledge. Some of the questions may be slightly embarrassing or uncomfortable.

The ward/child has the right to refuse any question she is not comfortable with or withdraw from the study entire. Doing so will not bring any punishment to the child.

Confidentiality and Anonymity

Be assured that any information provided in answering the questionnaire will be treated as confidential and no personal identifying information concerning you will be presented. Your name will is not required in the study and nobody will be able to trace your answers back to you. The information provided will be used only for the purposes this study and it will be accessible to only the Principal Investigator and will not be shared with anyone.

Dissemination of Results

The findings of this study will be made available to the general public through conference presentations, seminars, and general awareness programs in collaboration with the Media, Government agencies and Academic/Research Institutions in print, electronic and audio forms.

Participant Agreement

I agree that the above document describing the procedures, benefits and risks for this study have been read and explained to me. I have been given the opportunity to ask any question about the research and have been answered to my satisfaction. I therefore voluntarily agree to participate in the study.

…….. ……

Signature or thumbprint of participant Date

If you have any questions regarding this study, kindly contact;

Jane Akasi Cobbold;

Contact: 0540424966

OR

Hannah Frimpong

(0507041223/0243235225)

The Chairperson

GHS- Institutional Review Committee

P.O. Box MB190

Accra- Ghana

APPENDIX 2: QUESTIONNAIRE

UNIVERSITY OF GHANA, LEGON

SCHOOL OF PUBLIC HEALTH

Date……

Study Site…….....

Code……..

PARTICIPANTS' INSTRUCTIONS

Do not write your name; tick only one correct response and multiple responses where applicable. Only adolescent aged between 15-19 years are eligible for this study.

A. SOCIO-DEMOGRAPHIC CHARACTERISTICS

	QUESTIONS	RESPONSE	CODE
Q1	How old are you?		
Q2	Sex	Male []	1
		Female []	2
Q3	Highest level of education	None [ ]	1
		Primary []	2
		JHS []	3
		Secondary []	4
		Tetiary []	5
Q4	Religious affiliation	Christianity[ ]	1
		Islamic[]	2
		Traditional []	3

Q5	Marital Status	Married[ ]	1
		Single []	2
		Divorced []	3
		Separated []	4
		Co-habiting []	5
Q6	Place of residence		
Q7	What is the highest level of education of your mother?	None[ ]	1
		Primary []	2
			3
			4
			5
Q8	What is the highest level of education of your father?	None [ ]	1
		Primary [ ]	2
		JHS [ ]	3
		Secondary [ ]	4
		Tertiary [ ]	5
Q9	Who do you stay with?	Parents [ ]	1
		Guardian [ ]	2
		Partner [ ]	3
		By myself [ ]	4
Q10	Occupation of father		
Q11	Occupation of mother		
Q12	Occupation of other Guardian		

B. KNOWLEDGE ON CONTRACEPTIVES

	QUESTIONS	***RESPONSE***	***CODE***
Q13	Have you ever heard about contraception?	Yes[ ]	1
		No []	2
Q14	If yes, how did you hear about it?	Radio[ ]	1
		Teacher []	2
		Health worker []	3
		Family member []	4
		Friend []	5
		Partner []	6
		Print media []	7
		Others,(specify)……..	
Q15	Contraception is any method or procedures used to prevent pregnancy?	Yes[ ]	1
		No []	2
		Don't know []	3
Q16	Have you ever heard of any contraceptive methods before?	Yes [ ]	1
		No []	2
Q17	If yes, mention the methods that you know	IUD [ ]	1
		Injectable []	2
		Implant []	3
		Pills []	4
		Condom (male/female)	5
		Diaphragm []	6
		Locational amenorrhea method	7
		Others (specify)	8

Q18	Where did you hear of this contraceptive?	Radio []	1
		Family member []	2
		Friends []	3
		Partner []	4
		Print media []	5
		Teacher []	6
		Health worker []	7
		Others (specify) ……	8

Q19	Do you know a place in your community where you can get contraceptive?	Yes []	1
		No []	2
Q20	If yes, where?	Hospital/Clinic []	1
		Pharmacy/Drug store []	2
		Health provider []	3
		Family planning/PPAG Clinic	4
		Friend []	5
		Others Specify[]	6
Q21	Can a girl become pregnant form unprotected sex?	Yes []	1
		No []	2
		Don't know []	3
		Other specify []	4
Q22	Do you think that contraceptive during sex provide 100% protection from pregnancy?	Yes []	1
		No []	2
		Don't know	3
		Others specify	4

Q23	Do you think contraception is a woman business and a man should not worry about it?	Yes []	1
		No []	2
Q24	Women who use contraceptive may become promiscuous	Yes []	1
		No []	2
Q25	Have you ever had sex before?	Yes []	1
		No []	2
Q26	How old are you when you first had sexual encounter?	……	
Q27	Did you use any contraceptive the first time you had sex?	Yes []	1
		No []	2
		Not applicable	3
Q28	Have you used any contraceptive before?	Yes []	1
		No []	2
Q29	Which of the methods have you ever used?	IUD []	1
		Injectable []	2
		Implant []	3
		Pills []	4
		Female condom[]	5
		Male condom[]	6
		Diaphragm []	7
Q30	Which of the methods are you currently using?	IUD[]	1
		Injectable []	2

		Implant[]	3
		Pills[]	4
		Female condom[]	5
		Male condom []	6
		Diaphragm[]	7
		Locational amenorrhea method []	8
		None []	9
		Other (specify) [] …….	
Q31	Where do you get this contraceptive in the community?	Hospital/clinic []	1
		Pharmacy/drug store[]	2
		Health provider[]	3
		Family planning/PPAG clinic []	4
		Other (specify) …….	
Q32	How long have you been using contraceptives?	One month and above[]	1
		One to two years[]	2
		Three to five years[]	3
		Six to ten years[]	4
		Others (specify) ……	

Q33	How often do you use any of the methods?	Every time []	1
		Once a while []	2
		Not at all[]	3
		Others (specify) …….	
Q34	What is your reason for using contraceptive?	To avoid teenage pregnancy[]	1
		To prevent STI []	2
		Delay child birth []	3
		Others (specify) [] …….	
Q35	Who in your opinion should use contraceptive?	Married couples only[]	1
		All sexually active persons []	2
		Adults only[]	3
		Others (specify) …….	
Q36	The last time you had sex, did you or your partner use any contraceptive?	Yes []	1
		No []	2
		Not applicable []	3
Q37	Which method of contraceptive did you use?	Condom (male/female)	1
		Implant[]	2
		Injectable []	3
		Pills []	4
		IUD []	5

		Spermicides []	6
		Diaphragm []	7
		Locational amenorrhea[]	8
		Others (specify) ……	
Q38	The last time you use contraceptive, who influenced?	You []	1
		Friend []	2
		Partner []	3
		Parent []	4
Q39	If you wanted to, could you yourself get any contraceptive?	Yes []	1
		No []	2
Q40	If yes which preferred method?	IUD []	1
		Injectable []	2
		Implant []	3
		Pills []	4
		Condom (male/female) []	5
		Diaphragm	6
		Locational amenorrhea[]	7
		None []	8
		Others (specify) ……	9
Q41	Do you currently have a sexual partner	Yes []	1
		No []	2

Q42	Do you feel any pressure from them to have unprotected sex?	Yes []	1
		No []	2
Q43	If yes, from whom do you feel the pressure?	Friends []	1
		Relative []	2
		Partner []	3
		Others (specify)…….	
Q44	Do you think sex education can influence contraceptive use or non-use?	Yes []	1
		No []	2
Q45	Does your school syllabus include sex education?	Yes []	1
		No []	2
		Don't know []	3
		Not applicable	4
Q46	Did you get education on sex in school?	Yes []	1
		No []	2
		Not applicable []	3
Q47	Did you get on sex in the house?	Yes []	1
		No []	2
Q48	Is there any religious/cultural beliefs and practices that prevent the use of contraceptives among adolescent in your community?	Yes []	1
		No []	2
		Don't know []	3
Q49	If yes, can you mention them	…… ……	

Q50	What will you say are the reasons why adolescents do not use contraceptive? (can tick more than one)	Religious beliefs []	1
		Distance to acquisition of contraceptives []	2
		Attitude of service providers []	3
		Partner or family opposition []	4
		Side effects []	5
		Lack of knowledge []	6
		Infrequent sex []	7
		Hard to get preferred method []	8
		Too costly []	9
		Counselling received on contraceptives []	10
		Cultural beliefs []	11
		Others, (specify) []	12

APPENDIX 3: GHS ETHICAL CLEARANCE LETTER

GHANA HEALTH SERVICE ETHICS REVIEW COMMITTEE

In case of reply the number and date of this Letter should be quoted.

Research & Development Division
Ghana Health Service
P. O. Box MB 190
Accra
Tel: +233-302-681109
Fax + 233-302-685424
Email: ghserc@gmail.com
20th March 2018

MyRef. GHS/RDD/ERC/Admin/App 187101
Your Ref. No.

Jane Akasi Cobbold
University of Ghana
School of Public Health
Legon, Accra

The Ghana Health Service Ethics Review Committee has reviewed and given approval for the implementation of your Study Protocol.

GHS-ERC Number	**GHS-ERC: 071/12/17**
Project Title	Factors Influencing Contraceptive Use among Adolescents in the Sunyani West District
Approval Date	20th March, 2018
Expiry Date	19th March, 2019
GHS-ERC Decision	**Approved**

This approval requires the following from the Principal Investigator

- Submission of yearly progress report of the study to the Ethics Review Committee (ERC)
- Renewal of ethical approval if the study lasts for more than 12 months,
- Reporting of all serious adverse events related to this study to the ERC within three days verbally and seven days in writing.
- Submission of a final report **after completion** of the study
- Informing ERC if study cannot be implemented or is discontinued and reasons why
- Informing the ERC and your sponsor (where applicable) before any publication of the research findings.

Please note that any modification of the study without ERC approval of the amendment is invalid.

The ERC may observe or cause to be observed procedures and records of the study during and after implementation.

Kindly 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