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MPHIL COMMUNITY HEALTH AND DEVELOPMENT

**PREDICTORS OF CONTRACEPTIVE USE AMONG ADOLESCENTS IN SELECTED
SENIOR HIGH SCHOOLS IN THE KWABRE EAST MUNICIPALITY.**

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**A THESIS SUBMITTED TO THE DEPARTMENT OF SOCIAL AND BEHAVIOURAL
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SEPTEMBER, 2022

DECLARATION

I hereby declare that this thesis is my own work towards the award of a Master of Philosophy (Community Health and Development) and that to the best of my knowledge it does not contain any materials previously published by another person nor material which has been presented for the award of any degree in this university or elsewhere, except for references to other people's works which have been appropriately acknowledged.

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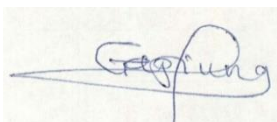
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DEDICATION

This milestone in my educational journey is enthusiastically dedicated to my ever-loving parents Mr. and Mrs. Owusu Banahene for their constant prayers and enormous support.

ABSTRACT

In Ghana, about 30% of pregnancies are unplanned, with adolescents having a significantly higher prevalence (70%) than adults do. Adolescent's reproductive decisions have a significant impact on their health, education, employment prospects, and general adult development. Investigating the rising incidence of teen sexual behavior, particularly in senior high schools, has become crucial. Despite the reality that many adolescent in Ghana engage in sexual activity, many do not know the different types of contraception that are available or how to use them effectively. This study therefore seeks to focus specifically on the predictors of contraceptive use among adolescents (15-19) in Senior High Schools in the Kwabre East Municipality. The data for the study were collected using a cross-sectional, quantitative, and analytical methodology. The study, which involved 395 students from five senior high schools in Ghana's Kwabre East Municipality in the Ashanti Region, used a structured questionnaire. Of these, 275 (69.6%) female students and 120 (30.4%) male students made up the study's sample. Both descriptive and inferential analysis were made. Adolescents' use of contraceptives was predicted using binary logistic regression. Odds ratios with a p-value of 0.05 and a 95% confidence interval were used to determine the significance of the association. The results showed that knowledge 272(68.86%) and attitude 342(86.58%) were high but prevalence of contraceptive use was low 126(31.90%) among the students. The findings also revealed a statistically significant association between the use of contraceptives and a number of other variables, including the school students attend ($X^2 = 44.435$, $p < 0.001$), sex/gender of student ($X^2 = 10.356$, $p = 0.001$), Form/level of students ($X^2 = 9.103$, $p = 0.011$), how often students are able to discuss issues concerning sex with their partner($X^2 = 24.732$, $p < 0.001$) and being in a relationship ($X^2 = 61.309$, $p < 0.001$).In conclusion, contraceptive use was sub-optimal but knowledge and attitudes towards it was high. Policymakers should regularly organize a Trainer of Trainers session for selected students (both males and females) from the municipality's various senior high schools who will return to their respective schools to enlighten their peers on methods of contraception, use, and side effects. The objective is to make adolescents feel welcome and unbothered using contraceptives by creating this environment.

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LIST OF ACRONYMS/ABBREVIATIONS

ASRH	Adolescent Sexual and Reproductive Health
AIDS	Acquire Immune Deficiency Syndrome
DHIMS	District Health Information Management System
FP	Family Planning
GDHS	Ghana Demographic and Health Survey
GSS	Ghana Statistical Service
HIV	Human Immune Virus
IUD	Intrauterine Device
KEMA	Kwabre East Municipal Assembly
LAM	Lactational Amenorrhea Method
LMICS	Low- and Middle-Income Countries
MOH	Ministry of Health
NFP	Natural Family Planning
NGO	Non-Governmental Organization
OR	Odd Ratio
PHC	Population and Housing Census
PPAG	Plan Parenthood Association of Ghana
SHS	Senior High School
STD's	Sexually Transmitted Diseases
SRH	Sexual and reproductive health
TFR	Total Fertility Rate
UNFPA	United Nation Population Fund
UNICEF	United Nation International Children Education Fund
WHO	World Health Organization

CHAPTER ONE

INTRODUCTION

The background, problem statement, significance, conceptual framework, study objectives, research questions, and thesis organization are all included in this chapter.

1.1. Background

According to the World Health Organization (WHO), adolescents are people between the ages of 10 and 19 and youth are people between the ages of 15 and 24 (World Health Organization, 2018). In any population, adolescents and young people make up the majority of those who engage in sexual activity. Many of these adolescents may be at increased risk for STIs, particularly HIV/AIDS, and the harmful effects of unprotected sexual activity (Biddlecom et al., 2007). Adolescent girls between the ages of 15 and 19 are responsible for over 14 million births annually, and 91% of these births take place in low- and middle-income countries (Der et al., 2021).

Adolescents may experience serious social and health issues, like unintended pregnancies and sexually transmitted diseases, due to a lack of knowledge, experience, and counseling (Oppong et al., 2021). Unintended adolescent pregnancies are regarded as the main concern among policymakers and the public due to the high costs associated with them for teen parents and their families in terms of the economy, society, and health. In addition, they frequently force teenagers into inappropriate marriages or restrict their chances for further education or employment while possibly leading them to protracted reliance on the family (Blanc et al., 2009). Adolescents' sexual wellbeing is composed of three main components: acknowledging sexual rights, sexuality education and counseling, and

confidential high-quality assistance (Apter, 2012; Deligeoroglou et al., 2006). Young men and women's reproductive decisions have a significant influence on their health, education, career prospects, and general transformation to adulthood (Blanc et al., 2009). The reason for this is that as the largest generation of young people ever enters the child - bearing years, the growth and size of the global population will be influenced by their reproductive choices for many years to come. Because more people could be employed, produce more, and consequently increase the level of the national income, population growth theoretically could prove to be advantageous economically. In reality, studies in many nations reveal that increased poverty has resulted from rapid population growth for the majority of people (Foster et al., 2014). This is because a country's ability to provide for the welfare of its citizens and realize its national development goals is constrained by the effects of rapid population growth. Implementing measures to lower the nation's fertility rate is the best way to contribute to solving the problem of rapid population growth. Contraceptive use is a key strategy for lowering fertility rates, (Agyemang et al., 2019). Amidst international investments in adolescent sexual and reproductive health (ASRH) initiatives, challenges remain in effectively addressing the information and service demands of teenagers in ASRH because many adolescents in developing nations, including Ghana, hardly ever use contraceptives. These difficulties include a lack of information and access to resources and services (Sserwanja et al., 2021). These barriers are especially apparent in the sub-Saharan Africa (SSA), where early motherhood and unintended pregnancies continue to be issues. To aid in the prevention of induced abortion, unintended pregnancies, and sexually transmitted diseases, it is crucial to better inform adolescents about contraceptives (Sánchez-Páez & Ortega, 2018).

Between the ages of 15 and 19, there are about 20 million female adolescents who are considered to need modern contraceptive methods, with the needs of adolescents in terms of sexual and reproductive health (SRH) remaining largely unmet at global levels (Sserwanja et al., 2021). The number of adolescent pregnancies is highest in Sub-Saharan Africa, which also has the lowest use of modern contraceptives. In middle- and low-income countries, complications associated with childbirth and pregnancy are the main causes of maternal morbidity and mortality among adolescents 15 and 19 (Sserwanja et al., 2021).

The prevalence of adolescent pregnancies has decreased in both the United States of America (USA) and Britain, according to a comparison study. In Britain, there had been no change in sexual behavior, but in the USA, fewer people reported having recent sex. There was a shift in favor of more potent contraception in both nations. In comparison to the USA, more people in Britain (65% vs. 49%) and more Americans (64% vs. 45%) reported having had sex in the previous year, six months, or four weeks. In Britain, more people (68% vs. 52%) said they used more effective contraception (Scott et al., 2020).

Additionally, the trend in Ghana for adolescents in the reproductive age range using contraceptives is alarming. In Ghana, the use of contraceptives is generally rising. For example, between 1993 and 2014, contraceptives usage rose from 10% to 22%, and during that same time, the satisfaction of the demand for such products increased from 18% to 30%. While the total demand for family planning services is 87% for unmarried sexually active adolescents, only about 30% and 42% of married and unmarried adolescents, respectively, still have unmet needs (Ameyaw et al., 2017).

The theoretical foundation of the Health Belief Model, which offers understandings to the possibility of using contraceptives among teenagers from the point of perceived risks, can

theoretically be used to understand contraceptives usage among adolescents. In this respect, teens who believe they are at risk for STIs and unintended pregnancies may be more highly probable to use contraceptives than teens who believe they are not at risk. Studies have demonstrated that notwithstanding adolescents' desire to use contraceptives, the majority of them face difficulties accessing contraceptive services in the absence of risk perception (Blanc et al., 2009; Gbagbo, 2020). The Anderson and Newmans' Health Care Utilization Model suggests that the use of a service, including contraceptives, is affected by known risk factors like demographics, health beliefs, and social structures; enabling factors like the availability of health staff and facilities, waiting period, and healthcare insurance subscription; and the need for care factors that concentrate on factors that are people. These theoretical foundations allow for the affirmation that adolescent contraceptive use is significantly influenced by both individual and environmental factors (Ahinkorah, 2020).

Sub-Saharan Africa (SSA) has seen a massive improvement in the end results of adolescents' SRH (sexual and reproductive health) in recent years, including a decrease in child marriage, an increase in adolescent enrollment in school, and a rise in the use of contraceptive methods. Even with this progress, the Adolescent Sexual and Reproductive Health outcomes in SSA continue to remain low when compared to other regions of the world, with the region having the highest percentage of adolescent pregnancy (18.8%) and the lowest percentage of contraceptive use (30%) (Oppong et al., 2021).

The most recent Uganda Demographic and Health Survey (DHS) found that 24.8% of girls between the ages of 15 and 19 had already started having children. Additionally, Uganda has one of the lowest regional rates of contraceptive prevalence. The high fertility rates in Uganda are partially caused by the high percentage of adolescents who give birth at young

ages (Sserwanja et al., 2021). Despite using a cross-sectional methodology, the study's data came from the 2016 Demographic Health Survey. Despite the rise in contraceptive usages seen among the young and single African women aged 15 to 24 (from 23% for the period 1996–2000 to 33% for the period 2011–2015), research from many countries in the region has shown that there is a high unmet medical need for contraception among adolescents in SSA. Notably, approximately two out of every five children being born among adolescents are unplanned in about 30% of all SSA countries (Oppong et al., 2021). According to a study done in Kenya, there has been a general shift in the use of long-acting modern contraceptives. This shift is more pronounced in adolescents with only a primary education, those from remote areas, households with lower incomes, and areas with a low contraceptive use rate. The results of the study were used to examine trends in adolescents' preferences for contraceptive methods using modern methods and to identify variables that are related to their decisions. Teenagers with higher socioeconomic status and a secondary school are gravitating toward short-term solutions. Results supported the socio-demographic factors of age, education, wealth status, and region as predictors of the use of contraception (Kungu et al., 2020).

According to Mwaisaka et al., (2020), the study identified a low level of contraceptive knowledge among young men and women in Kwale County, Kenya, with the majority of the participants disclosing their contraceptive fears and misconceptions are as a result of critical gaps in Sexual and Reproductive Health knowledge. The study's goals was to investigate and recognize both young men and young women's awareness of modern contraception and to highlight the main issues regarding modern pregnancy contraception methods.

Studies from Ghana (Keogh et al., 2021; Lebetkin et al., 2014) have additionally demonstrated that, had contraception been readily available, the majority of young women with a history of pregnancy would have used it to avoid those pregnancies. In Ghana, approximately 30% of pregnancies are unplanned, with adolescents having a substantially higher rate (70%) than adults do. Teenagers who become pregnant deal with a variety of health, educational, and social repercussions, as well as societal rejection that primarily manifests as stigma, marginalization, and social ostracization (Agyemang et al., 2019).

Unsafe abortion is widespread in Ghana because the country's laws only partially permit the procedure unless the pregnancy was caused by rape, defilement, or incest, or if the mother or the unborn child are at serious risk. Use of contraception is unquestionably crucial in preventing unplanned pregnancies, induced abortion, and complications associated with abortions (Center for Reproductive Rights, 2003).

The desire to use condoms among in-school heterosexual youth in the Eastern region of Ghana was significantly linked with attitudes toward condom use and perceived behavioral control over it, according to the evidence. As a result, the actual intent to use condoms predicted condom use behavior among the youth. The actual intent to use condoms also mediated the relationships between perceived control and behavior as well as the attitude-behavior relationship. This emphasizes how crucial it is to use behavioral beliefs, perceived control beliefs, and behavioral intention as key variables in condom awareness campaigns among heterosexual youth in Ghana who are enrolled in school (Der et al., 2021).

In order to achieve the Ghana Family Planning 2020 objective of increasing the use of effective contraception from 1.46 million in 2015 to 1.93 million in 2020 and intensifying contraceptive use among sexually active unmarried adolescents by 2020, it is crucial to

address the contraceptive needs of adolescents. Additionally, it is necessary to achieve Sustainable Development Goal 3.7 on sexual and reproductive health, which calls for universal access to contraceptive use for all ages by 2030 (Oppong et al., 2021).

This research seeks to concentrate specifically on predictors of contraceptive usage among adolescents (15-19) in Senior High Schools with the goal to cast new light on the subject of low contraceptive use among adolescents and to address the lack of data on this age cohort. Yet again, the study will collect its data using a quantitative, analytical cross-sectional approach.

1.2. Problem Statement

According to the most recent Demographic and Health Survey, only 47% of Ghana's demand for family planning is being satisfied. This clearly demonstrates that there are obstacles to obtaining family planning, and that these obstacles contributed to an unchecked population growth of 30.4% between 2000 and 2010. This supports the Ghana Demographic Health Survey's findings that 46 infant deaths occur for every 1,000 live births, there are 380 maternal deaths for each and every 100,000 live births, and 67% of young people are dependent on their parents (Deri, 2016). Though a recent study looked at the predictors of modern contraceptive use among young women in Low and middle - income countries, which included SSA countries, the authors' main focus was on community-level factors that affected the use of modern contraceptives (Ahinkorah, 2020). Acknowledging how several factors interact in trying to influence adolescents' use of contraceptives in senior high schools constitutes one of the knowledge gaps in this research (Appiah et al., 2020).

Nevertheless, the majority of these research did not perform a thorough analysis by age stratification and instead focused primarily on women between the ages of 15 and 49 who

were of reproductive age. Furthermore, very few research on adolescent contraceptive use have used only qualitative cross-sectional data collection methods to look at the various factors that influence contraceptive usage among adolescents in general but not among those enrolled in senior high schools. Accordingly, the majority of these research studies that used national data primarily used information from very old Demographic and Health surveys in order to generalize their findings to characteristics of a recently expanding population. Additionally, the 2017 Demographic and Health Survey, stated that the Kwabre District had a contraceptive prevalence rate of 19%, which was lower than the national average of 25%. There are, however, few studies on the factors that contribute to adolescents' low use of family planning services, including worries about health risks, religious restrictions, financial limitations, and concerns about side effects. Moreover, the majority of studies on the use of contraception are conducted among females (15-49 years old) without a thorough analysis by age stratification (Blanc & Way, 1998; Monjok, 2010; Oppong et al., 2021). Numerous studies conducted in Ghana have once more examined adolescent and young women's use of contraception (Boamah et al., 2014; Der et al., 2021; Deshmukh & Chaniana, 2020). The factors that influence adolescents in senior high schools who use contraceptives have, however, rarely been examined in studies on adolescent contraception (Ampah, 2019; Der et al., 2021). Again, in earlier research, the various factors that influence contraceptive usage in Ghana were examined, but patterns in contraceptive usage among female adolescents were also looked at in Ghana (Gbagbo, 2020). In a cross-sectional research by Akyeah, (2007) the majority of the females in the Kwabre District who participated in a study to identify potential constraints to contraception service use among women in fertile age (WIFA) 15 to 49 years indicated that while most women have high levels of awareness

about contraceptives, this knowledge does not always translate into the usage of modern contraceptives. Few of the participants (122) (30.5%) knew at least three contraceptive methods and 47 (4.7%), knew seven to nine. Additionally, 367 (91.7%) of the participants knew about two different contraceptive options. Similar to this, a study of reproductive women between the ages of 18 and 49 in the Kwabre East District found that the disparity between awareness and use is due to a variety of social, cultural, environmental, situational, and religious factors, some of which are the negative side effects of certain contraceptives, inadequate education about contraceptive use, the taboo culture, and others (Maame & Arhin, 2010). However, little is known about the prevalence and factors that influence contraceptive use among adolescents enrolled in senior high schools in the Ghanaian district that is now a Municipality. In senior high schools in Kwabre East Municipality, this study aims to explore the variables that affect adolescents' use of contraceptives. The results of this study will aid in the development of effective and appropriate intervention strategies to address adolescents' contraceptives usage in senior high schools in the Municipality.

1.3 Significance of the Study

The study provides essential data on adolescent contraceptive use in Kwabre East Municipality, which will be used to guide district-level policy makers in setting and formulating strategies to promote the widespread adoption and use of contraceptives especially among adolescents. In order to address the issue of inconsistent and non-use of contraceptives, which has been shown to significantly lower the rate of abortion and unintended pregnancies, this study also seeks to investigate predictors of contraceptive use among adolescents in Senior High Schools. Recognizing and meeting the sexual and

reproductive health (SRH) needs of adolescents will certainly assist to positively influence their SRH behavior, which will promote SDG 3.7, which calls for ensuring that everyone has access to family planning services, sexual and reproductive health information, and education, as well as the inclusion of various reproductive health into national programs and initiatives.

This study's findings may help adolescents in a way that will affect their use of birth control, academic performance, career prospects, and as a whole transition to adulthood, which will help them live healthier lives.

The study will help yield information on the methods known and used by respondents and this will also assist health authorities to stock the methods that are in demand and also sensitize communities on the other under-utilised methods.

The Kwabre Municipal Directorate of Health Services and partnership organizations may use the study's data to develop and assess an intervention to promote the use of contraception among teenagers enrolled in senior high schools in the Municipality.

Researchers could also use the findings of this thesis to support upcoming work in reproductive health studies and the provision of services to adolescents in Ghana.

1.4 Conceptual Framework

The conceptual framework illustrates uptake of contraceptive use to be dependent on knowledge, socio-demographic characteristics and attitudes and cultural beliefs. The more people have awareness about the importance of contraceptives, the more likely they are to use it. The use of contraceptive services is significantly influenced by attitudes and cultural beliefs as well.

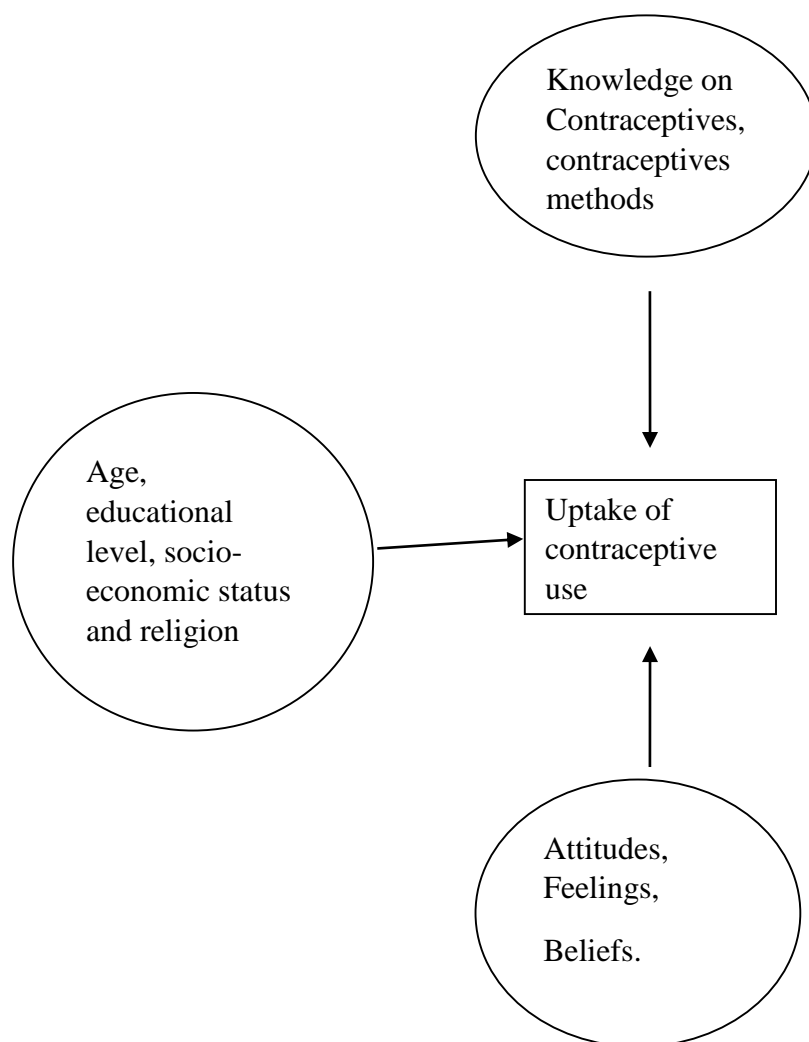


Figure 1 Determinants of contraceptives use.

Source: Adapted from Mustapha and Mohammed, 2006

1.5 Main Objective

The research seeks to assess the factors that predict adolescents' use of contraceptives in the selected senior high schools in the Kwabre East Municipality.

1.5.1. Specific Objectives

1. To assess the knowledge of contraceptives among adolescents in Senior High Schools.
2. To assess adolescents' attitudes towards contraceptive use in Senior High Schools.
3. To determine the prevalence of contraceptive use among adolescents in Senior High Schools.
4. To determine the predictors of consistent contraceptive use among adolescents in Senior High Schools.

1.6. Research Questions

1. What is the level of knowledge of contraceptives among adolescents in Senior High Schools?
2. What are the attitudes of adolescents in Senior High School towards contraceptive use?
3. What is the prevalence of contraceptive use among adolescents in Senior High Schools?
4. What are the predictors of contraceptive use among adolescents in Senior High Schools?

1.7. Outline of the Thesis

Six chapters make up this dissertation. The study background, problem statement, study objectives, conceptual framework, significance of the study, and study organization are all included in the first chapter. The related literature that has been reviewed is specifically covered in the second chapter, and the research methodology, sampling techniques, tools and methods for gathering data, data analysis, and ethical considerations are covered in the

third chapter. The fourth chapter presents the results, and the fifth chapter covers discussions of the results. The summary and conclusions of the study as well as recommendations for additional policy action and direction are the main focus of chapter six.

CHAPTER TWO

LITERATURE REVIEW

2.0 Introduction

Overall, literature reviews are used to build a knowledge base for conducting research (Abdul-Razak, 2016). This chapter examines literature pertaining to the topic "Predictors of contraceptive use among in-school teenagers. The literature is organized by contraceptive history, meaning of contraceptives, attitudes toward contraceptive use, the prevalence of contraceptive use, and predictors of contraceptive usage, all with adolescents in mind. The literature review was carried out using data from theses, journals, books, articles, and newspaper articles, all of which were gathered from various offline and online sources and databases. During the search, various keywords were used, including "contraceptive use," "adolescent knowledge of contraceptives," "constraints to contraceptive use," "adolescent and contraceptive use," "adolescent attitudes toward contraceptive use," "contraceptive prevalence," "enablers of contraceptive use," and "side effects of using contraceptives."

2.1. Contraceptives: History and importance

Reviewing the information on contraceptives and emphasizing their usefulness in avoiding conception and birth is a positive step in the right direction. This is because it is a defined term for any method intended at preventing birth and pregnancy. In academia, it is common to debate contraception by reviewing a large amount of material. Contraceptives are family planning framework approaches that allow individuals and couples to be specific about the number of children they want to have, when they want to have them, and how often they want to have them (Health & Conference, 2010). Contraception and the concept of family planning are well-known.

According to Glasier et al., (2006), contraceptives were developed in response to a global need for people to enjoy sex without being burdened by pregnancy and to be able to space and limit births. Many ancient communities regularly practiced celibacy, withdrawal (coitus interruptus), abstinence, and induced abortion in addition to sexual taboos (Maame & Arhin, n.d.; Deri, 2016). In countries like ancient Egypt, barrier treatments like vaginal sponges and cervical caps were used for hundreds of years until the known Common Era, and salts made of rock were being used as contraceptives during the Middle Ages (Simmonds, 2019). Women in ancient China used to restrict their fertility by drinking lead and mercury, which usually resulted in infertility and death. During the primitive period, witch-hunts and the great epidemic in the West contributed to limit birth control. Nonetheless, the ideas and actions of persons like Francis Place, Robert Malthus, and subsequently Marie Stopes and Margaret Sanger led to the reintroduction of contraception use (Simmonds, 2019). The twentieth century saw a record surge in contraceptive use as it became increasingly evident that the transition theory's explanation for the unprecedented global population increase was unsustainable (Newson et al., 2005; Salam et al., 2016). Contraceptive use is clearly necessary, as multiple studies have demonstrated its benefits. In their study, Salifu & Mohammed, (2020) found that in 172 countries in 2008, contraceptives made a significant contribution to a 44 percent decrease in maternal deaths (272,040 lives protected with an uncertainty intermission of 127,937-407,134), and that significant unmet need at the time would have yielded in an additional 29 percent decrease (104 000 maternal deaths avoidance). Another study done by Cleland et al., (2012) found that expanding contraceptive use in developing countries would result in a 40% decrease in pregnancy - related deaths in the 20 years prior to their work, and that for every proportional increase in contraceptive use,

there would be 4 to 8 fewer deaths per 100,000 live births. Furthermore, they stated that spacing children by two years can result in a 10% reduction in infant mortality and a 21% reduction in children aged 1 to 4 years (Cleland et al., 2012). According to the World Health Organization (W.H.O), almost 1.8 million of the 14 million unplanned births that take place in Africa each year could be avoided by contraceptive implants. In developing nations, there were 218 million unintended pregnancies, 55 million deliveries, 138 million unsafe abortions, 25 million miscarriages, and 118,000 maternal deaths in 2012. It was anticipated that contraceptives would reduce these numbers (World Health Organization, 2018). According to the World Health Organization (W.H.O), extra 54 million unplanned pregnancies, which include 21 million unplanned births, 26 million abortions (of which 16 million would be unsafe), and 7 million fetal death would be prevented if unmet family planning requirements in developing nations were met. Contraception would aid in preventing 79,000 infant deaths and 1.1 million maternal mortalities, among other statistics (Singh et al., 2012). According to Cleland et al., (2012), contraceptive use has macroeconomic implications, including poverty reduction, youth dependency reduction, and detrimental reduction in hunger, and it is critical for attaining the SDGs Target 3.7 which is to ensure universal access to sexual and reproductive care, family planning and education.

2.1.1 Definition of Contraceptives

The deliberate prevention of pregnancy by the application of various tools, techniques, drugs, methods of sexual activity, or chemicals is known as contraception. It also refers to any method or measure taken to prevent a woman from getting pregnant. Contraception gives a couple the freedom to bear as many children as they want by enabling them to engage in sexual activity without worrying about getting pregnant. All these are done with the goal

of maximizing convenience and privacy while keeping costs and adverse effects to a minimal (Rakhi & Sumathi, 2011). There are two main categories of contraceptive methods, both modern and conventional. Barrier methods first, including male and female condoms and the diaphragm; hormonal methods second, including pills, injectables, and implants; and third, the male and the female sterilization. (Figure 2.1). Lactational amenorrhea, rhythmic method, abstinence method, and withdrawal method (coitus interruptus) are among the conventional methods

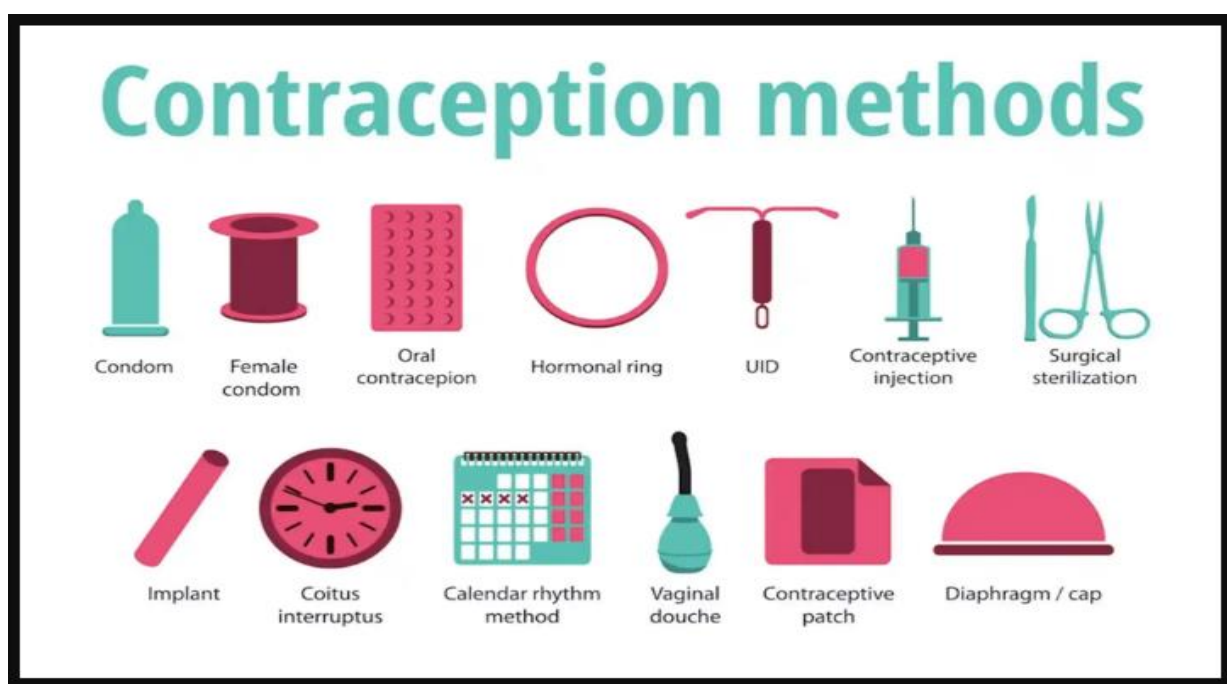


Figure 2.1: Contraception Methods.

Source: (<https://fertility-regulation.cochrane.org/>)



Figure 2.2: Contraception Methods.

Source: (<https://fertility-regulation.cochrane.org/>)

2.1.1.1 Adolescents

The period of life when a person is no longer a child but not yet an adult is known as adolescence. An individual experiences significant physical and psychological changes during this time. The adolescent also experiences changes in social perceptions and expectations. Sexual maturation occurs concurrently with physical development and frequently results in intimate relationships. The individual's capacity for abstract and critical thought as well as a sense of self-awareness develops when social expectations require emotional maturity. According to WHO, adolescent refers to people between the ages of 10 and 19, while "youth" refers to people between the ages of 15 and 24. The age range from

10 to 24 years is encompassed by the group "young people," which combines these two age groups that overlap (World Health Organization, 2018). More than ever, there are 1.3 billion adolescents in the world, making up 16% of the total population. Eighty-eight percent of adolescents reside in developing nations, and more than half of them are found in South Asia or the East Asia and Pacific region. Young people are multiplying quickly in Africa as well. In 2015, 226 million young people in Africa, or 19% of all young people worldwide, were between the ages of 15 and 24. By 2030, it is projected that there will be 42% more young people in Africa. Africa's youth population is anticipated to increase throughout the rest of the twenty-first century, more than doubling from current levels by 2055 (World Health Organization, 2018). Young people make up the majority of Ghana's population; of the country's nearly 31 million residents, 6.9 million (22%) are adolescents.

Adults and adolescents are affected by access to contraception as a result of macro-level laws, regulations, and social policies governing the types of contraceptives that can be distributed. At the micro level, however, there are distinctions between adolescent and adult women in terms of infertility, maturity, and knowledge, all of which influence their sexual encounters, experience, and behavioral patterns in respect to contraceptive acceptance and use. This increases their exposure to unprotected sex and the resulting repercussions. Adolescents that participate in early sexual debut increase their odds of infection even before they reach physiological maturity. Although the adolescent's body systems have begun to work, their defense mechanisms, particularly the cervix, are still maturing. Because the cervical mucus works as a non-specific barrier for numerous species that enter in adults, most adolescents do not have a full mucosal protective mechanism until after menarche.

Adolescents are up to six times more likely than adults to become infected with illnesses such as chlamydia, HIV, and gonorrhoea as a result of this (Rakhi & Sumathi, 2011).

2.1.2.0 Contraceptive Methods

2.1.2.1 Modern methods

Barrier method

The male condom

The male condom is a one-time-use latex rubber cover (condom) rolled along an erected penis shortly before sex to gather ejaculated and pre-ejaculated discharges near its tip. It acts as a barrier between the penis and the vaginal canal, preventing sperm from entering the woman. When used in the proper manner, the male condom is reported to be 95% effective. It can be used safely by sexually active males of all ages (World Health Organization, 2014). When it comes to using it, there is no need for a diagnosis. It is accessible in most pharmacies and does not require a prescription prior to purchase. Its effectiveness in terms of protection comes in two forms: protection against conception and protection against STI infections. The main problem of employing this method is that it is difficult to comply with, that it is not used consistently, and that it is used incorrectly. Another primary disadvantage of utilizing this approach is that it has the potential to rip or slip during use, so it is recommended to carry multiples in case of unanticipated occurrences. It's important to avoid using condoms that are outdated or perforated (World Health Organization, 2014).

The female condom and the Diaphragm

The female condom is a lubed rubber cap with a loose-fitting ring at every end. To keep ejaculated and pre-ejaculated excretions out of the woman's body before sex, it is intended

to be inserted into the vaginal canal just before the sexual encounter. The female condom is similar to the male condom in that both STIs and conception are prevented (Becker et al., 2015).

The dome-shaped diaphragm is placed into the vaginal canal to conceal the cervix and has a flexible rim. Since the diaphragm's function is to prevent sperm from passing through the cervix, the diaphragm must be left in place for at least six hours after sex in order for the acidic vaginal environment to kill the spermatozoa. Although research has proven that diaphragms are dependable, contain few allergy-causing ingredients, and have a high rate of group acceptability, their cost may be a major barrier to their use. To overcome the method's unpopularity among alternative contraceptive methods, it will require substantial promotion and influence among female users. As a female technique, the diaphragm offers protection against both unintended pregnancy. The size and hardness of the inner ring, as well as the design of this approach, may make it difficult to use (World Health Organization, 2014).

Hormonal methods

The Oral Contraceptive Pills

The hormonal method of contraception involves the use of hormones as a medium to prevent pregnancy. The oral pill is a group of artificial hormones that bring ovulation under control by maintaining the estrogen level high in a female. By that, it stops the pituitary gland from communicating with the ovaries to release an egg. Users who want to prevent unplanned pregnancy take the pill every day at the same time and the user stops at any given time she wishes to become pregnant. Some key setbacks of the pills are that it is not suitable for

women who are over 35 years as well as those with unexplained vaginal bleeding and those with heart/liver diseases, hypertension or diabetes(World Health Organization, 2014).

The Emergency Contraceptive Pill (ECP)

As a hormonal method, the use of the emergency contraceptive pill is to first of all prevent pregnancy after condom tear/slips during sex, secondly, it is used when two oral pills are missed in sequence, and lastly, it is used when an intra-uterine device is removed and there is fear of getting pregnant due to delay in injectables by more than 2 weeks(World Health Organization, 2014). After unprotected sex, two of the pill are taken within 3 days that is 72 hours after the act. The emergency contraceptive pill is taken taking into consideration the time of menstruation. By taking the pill, it prevents ovulation, fertilization, or implantation of the fertilized egg. The emergency contraceptive pill can be bought and used without prescription. As the name suggests, the pill is normally taken in emergency cases right after an unprotected sex has ensured(World Health Organization, 2014).

Another type of hormonal pill is the Progestin-only pills (POPs). This pill is also used to obstruct the ovulation of a woman or the sperm function by making the cervical mucus thick which makes it hard for sperms to swim and enter either the uterus or fallopian tubes. The usage of this pill comes with high failure rates especially women who are younger or less educated. Adolescents are less likely to take pills correctly and consistently(Becker et al., 2015).

The Injectables

The Injectable birth control is the injection of a progestin, such as Depo-Provera (DMPA—depomedroxyprogesterone acetate), in the arm or buttocks of a woman using a syringe every 3 months. It becomes ineffective if subsequent injections are postponed more than two weeks

from the prearranged date. The injectables job is to obstruct ovulation and also make the cervical secretions very thick to form a barrier to sperms passage. Studies has shown that this method is a 99% effective, while making it suitable also during lactation and can be easily administered(World Health Organization, 2014). Some of the known advantages of this method include the destruction of breast lumps or ovarian cysts. However, some major drawbacks in using this method are that there may be irregular Menstrual cycle, light vaginal bleeding that occurs outside regular period or cease of menstruation altogether. Also, users sometimes gain weight and returning to fertility after stopping it usage may take time therefore there is usually counseling and support for those who choose this method of contraception(Becker et al., 2015).

Implants

The implant is like a rod with the size of a matchstick that are inserted under the skin of the woman's upper arm through a minor surgical means for the body to release progesterin. This method can remain in the body for up to 5 years and does not require sexual activity to maintain it effectiveness therefore making it a long term birth control method. The job of it is to subdue ovulation and make the cervical mucus thick so as to prevent sperms from entering the cervix, as well as making a thin lining called endometrium(World Health Organization, 2014). This method is advisable for women who seeks constant contraception. Some known fact about this method is that when the implant is removed, fertility is restored within two to four months after surgery and the users of the method must go for a periodic check-up at least two to three times a year. The major setbacks of this method is that it is not advisable for women who have issues with liver and heart diseases, pregnant women and those with blood disorders(World Health Organization, 2014).

Intrauterine Devices (IUDs)

This flexible contraceptive is inserted into the uterus in the shape of a "T" to prevent pregnancy. A professional typically performs it 4-6 weeks after delivery, after an abortion, or after menstruation. There may be other shapes of the device but the most used one is usually made of nylon plastic coil. The device has no timeline therefore it can be in the woman for a long period up until when the woman decides to become pregnant (World Health Organization, 2014). The job of this device is basically for the prevention of fertilized egg from taking seed in the womb. Studies have shown that this method is 95–98% effective because of the spermicidal activity the device's copper ions and as such does not affect sexual intercourse. Some known key drawbacks of the method may include bleeding, cervical or pelvic infection for those with STDs. Users of this method are said to have a high risk of ectopic pregnancy, fibroids and sometimes heavy menstruation experience. Due to its nature users are advised to go for a periodic check-up because the device can be loosened or detached. All other IUDs work in a similar way like the copper IUD with all of them preventing sperm from entering and fertilizing the egg thus inhibiting the ovaries from releasing eggs (World Health Organization, 2014).

Sterilization methods

The Female sterilization (Tubectomy)

The Female sterilization method which can also be referred to as tubal sterilization (Tubectomy) is a surgical process done by a professional to block the fallopian tube's ability to prevent the sperm from fertilizing the egg (Rakhi & Sumathi, 2011). Amongst all the

methods of contraception, this is one of the permanent methods where both fallopian tubes are cut permanently and their ends are tied to stop the sperms from getting to the eggs. The female sterilization is the most reliable method of contraception known for women and can be done at any time of the woman's life most especially after their last child bearing and requires just a day of admission at the hospital. Even though the method is permanent, there are rare case where it can be reversed by re-joining the fallopian tubes for fertility to return yet the results are hardly successful. Therefore, a lot of thinking must go into the decision for choosing this method by the couple. The known fact is that some women begin to have heavy periods after opting for Tubectomy(World Health Organization, 2014).

The Male sterilization (Vasectomy)

The male sterilization is the second permanent method where surgically, an organ of the male reproductive system called the sperm duct (vas deferens) which serve as a passage way for sperms from the testes to reach the penis, are clogged. When this happens, the sperms produced are prevented from moving from the testicles to reach the penis for fertilization to take place(World Health Organization, 2014). It is a simple and reliable method not requiring hospitalization. According to Shriver et al., (2015), this permanent method does not either affect the sex drive of a man, health or sex life as some myths tries to portray it.

2.1.2.2 Traditional methods

Withdrawal Method (Coitus Interruptus)

This traditional method of contraception is definitely an ancient method man know. The method involves a mutual agreement between the couple especially the man for him to pull his penis out from the vagina right at the moment of ejaculating in order to stop his sperm from going into the woman. The nature of the method leaves it reliability in doubt because

some of the sperm might enter the woman right before the man ejaculates and the sperm that is left on top the woman's outside organ might also re-enter for fertilization to take place(World Health Organization, 2014). This ancient method ironically is the easiest yet without the man's control over his ejaculation emotionally, it cannot be successful. Researchers have discovered that approximately 40% of men's pre-ejaculations contain sperms, rendering this method unreliable(Rakhi & Sumathi, 2011).

Lactational Amenorrhea Method (Natural method)

The second method of contraception under traditional method is the lactational amenorrhea. It is frequently referred to as the natural method. The method basically involves using breastfeeding intentionally for contraception. Studies have shown that after childbirth, most women have their ovulation delayed a little due to constant breastfeeding, and women can use this to help them not get pregnant in the first six months only if they are continuously breastfeeding and have a way to suppress her menstrual flow because the method is known to be a reliable in terms of pregnancy prevention to about 98%(Qin et al., 2017; Rakhi & Sumathi, 2011; World Health Organization, 2014). However, there are a number of drawbacks to this method, such as the fact that some newborns sleep through the night, that the mother's breasts may be sore, which may prevent breastfeeding, and that, according to some studies, the majority of postpartum women (60% of them) start menstruating even before they reach the fourth month(Becker et al., 2015).

Periodic Abstinence Method

Another natural method of conception is the Periodic abstinence method or sometimes known as the rhythm method of contraception. In order to avoid engaging in sexual activity on the days when she is most fertile, the woman uses this method to calculate the ovulation

period when she is most fertile by carefully noting some of the changes that occur in her body, such as her menstrual cycle, body temperature, or any other changes she typically experiences during menstruation (World Health Organization, 2014). Despite the fact that many people have acknowledge awareness of this method, in reality only few of these people can really pinpoint their fertile days of the month. However, there are several challenges with this approach that prevent women with irregular periods from using it, as well as those who are postpartum or in the menopause stage. Also when using this method, the couples need to limit the frequency of their sex intercourse to just some few days only in a month (World Health Organization, 2014). Again, the nature of this method requires that fertile days are carefully calculated so that pregnancy do not occur because sperms can live in the uterus of a woman for about five (5) days (Eltomy et al., 2013).

2.2 Importance of Contraceptives

Research has indicated that family planning and contraceptives methods are very important in the lives of people due to 1. the freedom and other economic importance it gives. 2. the well-being and autonomy it gives to women. 3. And how it supports the health and development of communities. It must as well be very easy to get to all sexually active people, especially adolescents. Stakeholders such as doctors, midwives, clinicians, nurses and other health workers must be trained on the various contraceptives in every dimension that is appealing to the people.

Contraceptives helps to prevent various maternal morbidity and death

Contraception benefits health-wise as it prevents unplanned pregnancies which goes a long a way to reduce maternal morbidity and death. To explain further, family planning and contraceptives enable couples to space their pregnancies, delay pregnancies in adolescents

who risks having health problems or death due to childbirth, and also help prevent older women who are at high risk from conception. The use of family planning and contraceptives gives power to women in terms of limiting family sizes as it helps avoid any unplanned pregnancies and the stage where unsafe abortion is needed. Studies has shown that an affordable and most effective way to save lives is through adapting family planning or contraceptive use. According to Amissah et al., (2020), the estimated direct cost of accessing family planning is GHS 7.90 which is equivalent of US\$1.76 per user annually.

Contraceptives reduces the need for unsafe abortion of unplanned pregnancies

An estimated 42 million women opt for unsafe abortions due to unplanned pregnancies. This results in about 68,000 women dying to unsafe abortion making it one of the leading causes of maternal deaths (13%) annually, mostly in developing countries (Haddad & Nour, 2009). Contraception and family planning are known to have prevented many abortion-related deaths by reducing unplanned pregnancies with high risk complications.

It helps reduces newborn deaths (infant mortality)

The use of contraceptives can contribute to the prevention of the narrowed spaced and untimely pregnancies and births, which has resulted in the reduction of some of the world's highest infant death rates. Research has revealed internationally that when couples do not space their births by more than two years, the babies are likely to die within their first year of birth as compared to those born after three or more years. New born babies of mothers who lose their lives to childbirth also are at higher risk of death and poor health.

It helps prevent people against HIV/AIDS and other STIs

The use of contraceptives has help reduced the risk of unplanned pregnancies especially among females who have HIV, and this has further reduced the number of babies and those who will be orphaned. The dual protection nature of contraceptives (male and female condom) has shielded a lot of people against unplanned pregnancies, HIV and other STIs. Annually more than 577,200 unplanned pregnancies among to HIV-infected women in Africa are avoided through contraceptive usage and another 533,000 more unplanned pregnancies could be prevented if other sexually active women in the Africa use contraceptives(Singh et al., 2012).

Its benefits include People's empowerment and education improvement

Because of family planning and contraception, people can make informed decisions about their sexual and reproductive health, as well as provide women with more opportunities for education and engagement in society, including paid work. Furthermore, having smaller families allows parents to devote more time and attention to each child. Children with fewer siblings are more likely than those with a lot of siblings to complete their education.

Reducing the number of adolescent pregnancies

Preterm and premature births are more likely in pregnant teenagers. Adolescent mothers have a higher rate of neonatal death. Pregnant adolescent girls are frequently forced to drop out of school. Protracted consequences will follow for them as individuals, their families, and the society at large.

Population increase is slowing.

Family planning is essential to reducing the population's unsustainable growth and the negative effects it has on national and regional development programs, the economy, and the environment.

2.3 Knowledge of Contraceptive Use

The importance of teenage reproductive health has grown over time. This is because teenage pregnancy carries risk factors like stillbirths, infant deaths, induced abortion, and other problems that can result in maternal or neonatal mortality (Solomon-Fears, 2011). Due to their lack of financial and social resources to support their families, pregnant adolescent girls are more likely to withdraw from school. Even though there are risks associated with early pregnancies, few sexually active 15–19 year old adolescents use contraception (Kinaro et al., 2015). Adolescents between the ages of fifteen and nineteen give birth to 11% of all births worldwide, irrespective of the fact that the ratio of teen mothers has decreased since 1990 (WHO Conference, 2015). In Brazil, it was discovered that less educated adolescents were sexually active at a younger age and had minimal awareness of contraception measures (Martins et al., 2006). Adolescents' maternal mortality rates are often twice as high as those of women in their thirties (Nove et al., 2014). Adolescents (12-19 years old) in both private and public schools in Brazil were found to have poor understanding of contraceptive techniques in another study. Condoms, both female and male, constitute the most commonly used method, followed by the pill. Below is a listing of methods of contraception that both wealthy and underprivileged teenagers are familiar with: Day after pill, diaphragm, IUD, injectable contraceptive, calendar method, and spermicides. Teenagers from private schools knew more about IUDs and the calendar technique than their counterparts from public schools (Martins et al., 2006). In low- and middle-income countries, contraceptives can

reduce maternal mortality by 20 to 30 percent; nevertheless, teenagers' access to family planning (FP) has been limited by socio-cultural norms (UNFPA, 2005). Adolescents are aware of reproductive health, however research from various countries have revealed that many are uninformed or lack a better grasp of contraception and contraceptive methods (Enameh et al., 2014; Martins et al., 2006). Several elements have been identified as contributing to this, according to studies. Numerous studies showed that although adolescents are well-informed about the various contraceptive options available to them, the method they choose depends solely on how much information they have. Regardless of the fact that contraception is free and widely available in South Africa, one-third of female adolescent become pregnant by the age of 19. Female adolescents seek advice from their peers in part because their mothers, teachers, and other relatives provide them with ambiguous information about reproductive health. They even claimed that because each partner's blood is different, having numerous sexual partners and alternating them could prevent pregnancy. Others seek out traditionalists for anti-pregnancy customs such as burying their menstruation rags and consuming concoctions prayed over by religious authorities. The study also revealed that adolescent girls use contraception infrequently as a result of scolding and harsh treatment by nurses who refused to recognise adolescents as sexually active people when they visited clinics (Wood & Jewkes, 2006). In a study of female adolescent sex behavior and contraceptive use in Nigeria, it was discovered that girls favored coitus interruptus and rhythm techniques. This was ascribed to possible concerns about the negative effects of newer contraceptive methods, decreasing condom sensitivity, and parental disapproval of the use of artificial contraception (Okpani & Okpani, 2000). Over 95.3 percent of the respondents could name at least one current method of

contraception, and 83.8 percent of those between the ages of 15 and 19 and 87.5 percent of those between the ages of 20 and 24 could name any permanent method, demonstrating the sample's high level of knowledge about contraception, according to a study in the Democratic Republic of Congo. Teenage girls did not have enough self-confidence to discuss condom use, according to a study of high school students in Ghana's Upper East region. Instead of going out and purchasing condoms, they would prefer to avoid being branded as bad girls or cheaters by their sexual partners (Rondini & Krugu, 2009). In a study of adolescent sexual and reproductive health in Ghana, Awusabo-asare et al., (2006) found that adolescents aged 12 to 19 had insufficient knowledge of reproductive health issues. Only 26% of these adolescents (78.9% of the females and 67.0% of the males) were aware that women have reproductive cycle when pregnancy is possible. In the 15–19 age group, 60% of females and 53% of males were aware that a woman could become pregnant after just one sexual encounter. Even after washing their sex organs right after sexual contact, more than half of teenagers (56%) were unaware that pregnancy existed. In Ghana, it has been discovered that adolescents (12–19 years old) are aware of at least one form of contraception. 52.7 percent of females and 52.5 percent of males knew about pills, compared to 23 percent and 23.1 percent of females and males, respectively, who knew about IUDs. Only 18.7% of females and 17.6% of males knew about the injectable, while 56.5% of females and 55.5 percent of males were familiar with it. Men knew 20.1 percent more about the emergency contraceptive pill than women did (18.4% vs. 20.1%). The male condom received the highest ratings from both men and women, scoring 87.9% and 90.6%, respectively. Foam/Jelly was the less used contraception among adolescents, with 11.8 percent of females and 15 percent of boys using it. Furthermore, 60 percent of females and 58.5 percent of males had discussed

contraception with their relationships, according to the report (Awusabo-asare et al., 2006). Biddlecom et al., (2007)'s further research among the age group 12–19 in Ghana, Burkina Faso, Malawi, and Uganda revealed that the male condom was the most-recorded widely used form of contraception, with 43–65% females and 50–66% males having used them in the past. On the contrary hand, Burkinabe, Ugandan, and Malawian female adolescents were more probable to use conventional methods (89.2%). According to a Ghanaian survey, birth rates among adolescents in this age group are relatively high, despite a minor decrease from 14 percent in 2000 to 12.2% in 2007(Ahinkorah, 2016). Pregnant teenagers and adolescent moms were found to be higher than the national norm in Ghana's Kintampo north and south districts, according to a research (Boamah et al., 2014). According to Abdul-Razak, (2016)'s research, adolescents are generally aware of contraceptives as a result of media advertisements. Their knowledge, on the other hand, does not match their understanding of proper contraceptive use. In comparison to their female counterparts, males demonstrated a higher level of knowledge about contraceptive use, which was demonstrated in his study. Furthermore, in their study 'Determinants of contraceptive use among sexually active unmarried adolescent girls and young women aged 15-24 years in Ghana, Oppong et al., (2021) discovered that male sterilization was the least popular method of contraception (33%), while the male condom was the most popular (99%). A minimum of one modern and one conventional method of contraception were each known by 99.8% and 95.0% of the population, respectively. According to Boamah et al., (2014), the male condom was the frequently mentioned method (84.0%), according to a study on contraceptives usage among teenagers in Kintampo, Ghana. Around 89% (705/793) of the participants knew about at least one method. When it came to particular types of contraceptives, both men and women

responded most spontaneously to condom knowledge (85.8%; 681/793). The spontaneous response was lower with condoms than with the pill (31.4%; 249/793), injection (25.5%; 203/793), and emergency contraceptives (5.6%; 45/793). In comparison to women, men are more knowledgeable about at least one form of contraception (92.1% versus 86.6%, respectively). Young people aged 15 to 17 had less knowledge of at least one form of contraception when compared to those aged 18 to 19. More than 90% of adolescents in another survey by Awusabo-asare et al., (2006) had learned of at least one “modern” method of contraception. Contraceptive knowledge varied by age: 84–85 percent of teenagers aged 12–14 years had heard of contraceptive techniques, compared to 95–97 percent of those aged 15–19 years. Despite the fact that over 90% of adolescents had heard of modern contraceptive methods, only approximately a third (31 percent of females and 36 percent of males) said they were familiar with traditional contraceptive methods. Twelve to fourteen-year-olds had heard of three current contraceptive techniques on average, whereas fifteen to nineteen-year-olds had heard of five. The pill, used by 53 percent females and 53 percent males, the male condom, used by 88 percent females and 91 percent males, the female condom, used by 70 percent females and 73 percent males, and injectables are the most widely used modern methods (57 percent females and 56 percent males). Older women were more likely than younger ones to say that a medical facility or medical expert gave them advice on contraception (75.7 percent vs. 62.3 percent from a community health worker). The radio (30.8%) and family and friends (54.1%) were the following most popular information sources in both groups (Casey et al., 2020). A Ghanaian survey found that adolescents' knowledge of and use of contraceptives varied, with roughly (65%) reporting ever hearing of a contraceptive method and (21%) reporting ever using a modern

contraceptive, predominantly an emergency contraceptive tablet (48 percent). The most common source of contraceptive knowledge was television (33 percent), and the most common contraceptive sources were respondents' parents, relatives, and guardians (72 percent) (Gbagbo, 2020). In a study published in Ghana by Ampah, (2019), 81.67% of those who took part in her study knew how to use modern contraception. The vast majority of those that were aware of the modern contraceptives (72%) learned about them from their fellow peers.

2.4 Attitudes Towards Contraceptive Use

A young age structure may result from the impact of a high adolescent fertility rate on population growth. According to the census data for 2021, approximately 56% of the population is under the age of 25 (Ghana Statistical Service, 2021). As a result of this youthful age structure, the country faces socioeconomic and health issues. Young people have been reported to be exposed to pregnancy-related health issues and sexually transmitted illnesses such as HIV/AIDS through unprotected sexual practices. Unsafe sexual behavior among adolescents is still influenced by their lack of knowledge about the importance of contraceptives in the fight against STDs and pregnancy. Understanding the main causes of low contraceptive use among adolescents is essential for modifying attitudes toward the use of contraception in this age group (Kinaro et al., 2015). Adolescent's attitudes toward using contraception are influenced by the information they learn from the media, their schools, their families, and society. However, it has been found that a lot of sexually-related information is incorrect, unclear, and sometimes even deceptive. This has had a detrimental effect on sexual behavior. Additionally, there is no established standard for the language or manner in which to discuss sexuality with adolescents, leaving messages open to personal

interpretation. It has also been observed that some sexually explicit material without abstinence messaging causes adolescents to have unfavorable beliefs and attitudes about unprotected sex. Contraceptives provided a sense of safety to the majority of respondents in a survey in Fiji, with 289 (88.9%) agreeing or strongly agreeing. Of the 254 respondents, the majority (78.2%) agreed or strongly agreed that contraception is beneficial to men. Only 82 respondents (25.2%) strongly agreed or agreed that talking about contraception with their partners was awkward. Only 66 respondents (20.3%) agreed or strongly agreed that their male partners did not support their use of contraception. Most respondents (291/89.5%) believed that contraceptives safeguarded the family's and the community's health. Similarly, well over three-quarters of the 256 respondents (78.8%) agreed/strongly agreed that cultural attitudes influenced a woman's decision to use contraception. The majority of respondents (269/82.8%) agreed/strongly agreed that their spouse's decision to take contraception was impacted by their husband's reservations. A large majority of participants (261/80.3%) agreed or strongly agreed that a man's perspective on contraception influences a woman's decision to use contraception (Lincoln et al., 2018). Research shows that adolescents' lack of awareness frequently affects their sex choices. Due to the recent collapse of social structures that were once used to instruct children about sexuality, adolescents in Africa are engaging in sexual activity without adequate guidance. In a Nigerian study, only 39% of parents revealed they had talked or discussed sex-related issues with their children in the year before the study (Muhwezi, 2015). To support this, research from Bangladesh and Nigeria revealed that teenage girls thought they could not become pregnant if they cleaned their genitalia or decided to jump up and down after sex. Understanding the messages/information on sexuality issues and contraception that adolescents end up

receiving at school and at home from teachers, peers, parents, and other family members is important in order to address the challenges presented by attitudes toward the use of contraception (Kinaro et al., 2015). Adolescents' attitudes toward reproductive health and contraception are influenced by their immediate surroundings. A higher probability of adolescents using contraception has been connected to parental support and involvement in sexual education for teenagers. However, only married people are allowed to engage in sexual activity in many traditional societies. The absence of high-quality adolescent-friendly services and information is another problem associated with low teenage contraceptive use (Oye-Adeniran et al., 2005). In Kenya, only 7 percent of the surveyed public health facilities provided services geared toward young people. Due to the majority of clinics in Kenya only being accessible from 8 a.m. to 5 p.m. from Monday through Friday, teenagers who also are likely to be attending school during these hours are unable to access them (Ontiri et al., 2021). Because attitudes are known to impact behaviors in all domains, it is expected that teenagers who have positive attitudes toward all aspects of contraception will use it more frequently. Attitudes and perceptions are shaped in part by socio-cultural beliefs. Another study in Cameroon found that in 59.5 percent of cases, both the man and the wife decided on the number of children to have, however in 23 percent of cases, no discussion took place. In 39.6 percent of cases, the couple made the decision to use contraception, whereas only the woman made the decision in 40% of cases and alone the male made the decision in 23.1 percent of cases. 9.4% of males were unaware that their wives were using contraception at the time (Nansseu et al., 2015). Different views were also observed in Ghanaian studies. In a study conducted by Atuahene et al., (2016), it was discovered that practically all respondents saw contraception use as a critical health measure

(97 percent). Respondents cited spacing births (57 percent), delaying births (42 percent), and preventing sexually transmitted illnesses as the top reasons for taking contraception (21 percent). Furthermore, Rondini & Krugu, (2009) stated that students have a strong attitudinal hindrance to condom use, according to their study "Knowledge, Attitude, and Practices Study on Reproductive Health Among Students," with female students reluctant to purchase condoms out of shyness and fear of being branded as "bad girls." Males, on the other hand, would never accept a condom from a girl since it would suggest that "the girl is untrustworthy." Because condom use appears to be strongly linked to trust, negotiating its use can be problematic, with girls unwilling to enforce their use due to the danger of being branded. In the same way that "abstinence" was the most common response to how to prevent unwanted pregnancies among STIs and HIV/AIDS prevention, "abstinence" was the most common response to how to prevent unwanted pregnancies in 78.5 percent of males and 87.1 percent of females. Condoms were cited by almost half of both males and females (48%) and other contraceptives (oral and injectables) by 36.7 percent of males and 23.6 percent of females. Even though they misunderstand what "safe periods" are, fewer students (5.1 percent males and 2.9 percent females) acknowledged "penis withdrawal" or restricted sexual activity to "safe periods." To avoid unwanted pregnancies among guys, a special emphasis was placed on sexual education and counselling (15.2 percent males versus 4.3 females). When asked if they use any type of family planning, 74.7 percent of men and 82.1 percent of women said no. Furthermore, approximately (80%) of both males and females said they had never visited a family planning centre.

2.5 Prevalence of Contraceptive Use

The number of women and girls using contraception at any given time is measured by the contraceptive prevalence ratio. In a research conducted by Singh et al., (2012), in 2012, 57 percent of women worldwide used modern contraception, up from 48% in 1990. Additionally, the proportion of women aged 15 to 49 who reported using a modern contraceptive method increased slightly or stayed stable regionally between 2008 and 2012. It increased from 24% to 27% in Africa, but remained at 61 percent and 67 percent in Asia, Latin America, and the Caribbean, respectively. There has been a lot of diversity between countries in these locations. Males' contraception use makes up a minor subgroup of the aforementioned prevalence percentages, according to the report, with the modern contraceptive techniques for men confined to only male condoms and sterilization also known as vasectomy. Although it continues to be uncommon in Sub-Saharan Africa, contraceptive use has increased in many regions of the world, especially in Asia and Latin America. Despite not yet reaching the levels seen in industrialized nations, the prevalence of contraception among currently married women of reproductive age has been rapidly rising. South and Southeast Asia and Africa are the regions with the highest rates of unsafe abortion, while Europe and North America have the lowest rates (Rakhi & Sumathi, 2011). Numerous studies have been carried out globally to highlight the issue of inadequate adolescent use of modern contraceptives and the causes of the high rate of adolescent nonuse of modern contraceptives. According to a study conducted in several poor countries, adolescent contraceptive use is not guaranteed because most adolescents are inconsistent in their contraceptive use. Fear of negative effects, ease of use, changing demands, and switching to alternative methods were among the reasons provided by these teenagers. In the

United States, 78 percent of females and 85 percentage of males used contraception during their initial sexual encounter, according to a Guttmacher study. When using a contraceptive for the first time, adolescents who begin having sex at 14 or younger are less likely than older teens to do so. Condoms have been recognized as one of the most often used kinds of contraception for people having their first sexual experience, with roughly 68 percent of women and 80 percent of men using them (Starrs et al., 2018). Somba et al., (2014) studied female undergraduate students at two Tanzanian institutions and discovered that only 41.5 percent of sexually active respondents (70.4 percent) said they had ever taken contraceptives. Aninanya et al., (2015) discovered that adolescents under-utilized SRH services and also that the regular age of sexual debut was age 14. Furthermore, they found that unprotected first sex accounted for 50% of all teenage sex activities. Furthermore, 8% of female teenagers admitted to using contraceptives, and 13% of female adolescents either have given birth or were expecting their next child. Another study conducted in Nigeria found that young people who have not yet had their first sexual experience are less likely than older youth to use contraception, and that about 77 percent of young people who know about contraception do not use it(Ojikutu et al., 2010). Many adolescent girls and boys are unsure of their legal eligibility to access and use contraceptives, or even if so, which kind to use and where to find it. Due to the possibility that they lack access to user manuals, they are also concerned about using contraceptives(Kemi et al., 2015). In Sub-Saharan Africa, the prevalence of contraception use among single people is substantially lower, as evidenced by research from Rwanda, where around only 3% of teenagers do use contraception, and Burkina Faso, where about 56% of adolescents do not use contraception (Basinga et al., 2012). According to a study done in Nigeria in the Niger Delta state, underdeveloped nations'

access to contraceptive methods and reproductive guidance is constrained by a lack of resources. Based on the report, individual religious beliefs that forbid people from using artificial birth control or family planning methods have made the situation worse (Ibrahim Isa & Olugbenga Owoeye Gani, 2012). According to the earlier report of the Ghana Demographic and Health Survey GDHS, (2015), Ghanaian women use any type of contraception at a rate of about 23%, with married women using 27% and unmarried women using 45 percent. Among married women, an estimated 22% employ a modern method and 5% use a traditional method. The type of contraception that may work best for some women is determined by their age. Contraception usage among adolescent girls who are between 15 to 19 years old is quite low, at around 19 percent. The injectable is preferred by the majority of married women, with roughly 8% of them using it. Implants and the pill, which each account for roughly 5% of the total, are again extensively used by the said presently married women (GDHS, 2015). The pill is used by about 8% of sexually active, unmarried women, while injectables, rhythm, and implants each account for 7% of users (5 percent) (Marrone et al., 2014). Females who are not married (13 percent) are significantly more likely to use a traditional method than married women are (5 percent). According to the literature, the vast majority of teenagers who are not married do not wish to become pregnant, and some young people who are married do not wish to become pregnant right away either. Additionally, some of these married couples want to delay having a child number two after their first (Cleland & Ali, 2006). Adolescent girls have the lowest prevalence of contraception (21%), which has remained stable across Sub-Saharan African nations. In Ghana, individuals are afraid of adverse effects and some religious customs prevent them from utilizing contraceptives. Young people do not use contraception because their parents

do not support it and because the majority of teenagers think they will never get pregnant (Ghana Demographic Health Survey, 2008).

Adolescents in Ghana have a low prevalence of contraception. According to the GDHS 2014 and 2008, the prevalence rate of modern contraception among teenagers aged 15 to 19 years old was 17 percent as well as 5%, correspondingly (GDHS, 2015;GDHS, 2008). In addition, according to a study conducted by (Godswill, 2014), all participants were knowledgeable about at least one method of contraception, and about 87.5 percent agreed with its use. Less than half (38.1 percent) admitted using contraceptives in the past, and 34.2 percent do so now.. According to Maputle, (2007), most teenagers are aware that contraceptives are available, but they lack information about how to use them, which leads to negative attitudes regarding their use. Only 16% of young married women between the ages of 20 and 24 and 8% of young married women between the ages of 15 and 19 use contraceptives, respectively, according to (Institutet & Nalwadda, 2012). In addition, traditional contraceptive techniques are used by 5% of married adolescents between the ages of 15 and 24. Furthermore, 63 percent of sexually experienced female adolescents aged 15 to 19, and 43 percent of sexually experienced female adolescents aged 20 to 24, reported never using any form of contraception. In Ghana a research by Awusabo-asare et al., (2006) discovered that condoms were the most popular modern method of birth control for more than half of teenagers who had ever used contraception, a number that has been rising.

According to Boamah-kaali et al., (2018), a total of 55% of sexually active young people who had ever used modern contraception had done so during their first sexual encounter, 30% had done so frequently, and 44% had done so occasionally. According to statistics on sexual activity, female adolescents in Ghana engage in more sexual activity than male

adolescents. For example, the Ghana Statistical Service stated in the Multiple Indicator Cluster Survey, (2006) that 85% of female adolescents, compared to 57% of male adolescents, between the ages of 15 and 24, had had sexual experience. This result is in affirmation with earlier research by Awusabo-asare et al., (2006), Enuameh et al., (2014), and Gimeno-Gilles et al., (2016), which discovered that teenage girls engage in more sexual activity than teenage boys.

2.6 The predictors of 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 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).

2.6.1 Health-related factors and Contraceptive Use among 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.

2.6.2 Socio-demographic Factors and Contraceptive Use among Adolescents

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).

2.6.3 Peer-related Factors and Contraceptive Use among Adolescents

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.

2.7. Conclusion

The relevant literature on contraceptive knowledge, attitudes, prevalence, and usage among adolescents was examined and expatiated in this study. Although there are a lot studies on contraceptive knowledge, attitudes, prevalence, and usage among teenagers, most of these studies took place in the West and in a few regions of Africa. There are a number of studies in Ghana that only concentrate on teenagers in general, and the majority of these studies fail to identify the factors that influence teenagers in senior high schools who use contraceptives, suggesting that such studies are urgently needed. This analytical cross-sectional study closed this gap by examining contraceptive knowledge, attitudes and usage among school going adolescents in senior high schools.

CHAPTER THREE

RESEARCH METHODOLOGY

3.0 Introduction

The geography of the study area, the study population, sample size, and the methodology used to address the study's overarching objectives are all covered in this chapter. In addition, the chapter delves deeply into the study design, data sources, research type, data collection tools, sampling techniques, and data analysis methods.

3.1. The Study Design

The study used a quantitative approach for data collection with an analytical cross-sectional study design. Quantitative approach was used because it helped produce objective data that can be clearly communicated through statistics. Additionally, the researcher was able to complete the study in a reasonable amount of time by using an analytical cross-sectional study design because data on both dependent and independent variables were gathered within the same time. The primary objective of this study design was to be able to generalize the results for the study population by using a representative sample that is a cross-section from the study population at a particular point in time (Omair, 2015).

3.2. Study Area

The Kwabre East Municipality, one of the 18 Municipalities in Ghana's Ashanti region, served as the study's location. In Ashanti Region, the Kwabre East Municipality is practically in the middle. It is 246.8 square kilometers in size. The distance between Mampong and Kumasi is 14.5 kilometers. There are 6 Zonal Councils, 31 Electoral Areas, and 1 Constituency among the 43 communities (Figure 3.1).

Sekyere South District is to the south, Ejisu Municipal is to the southeast, Atwima Nwabiagya Municipal is to the west, and Offinso Municipal is to the northwest. The Kumasi Metropolitan Area is to the north (Debrah, 2010).

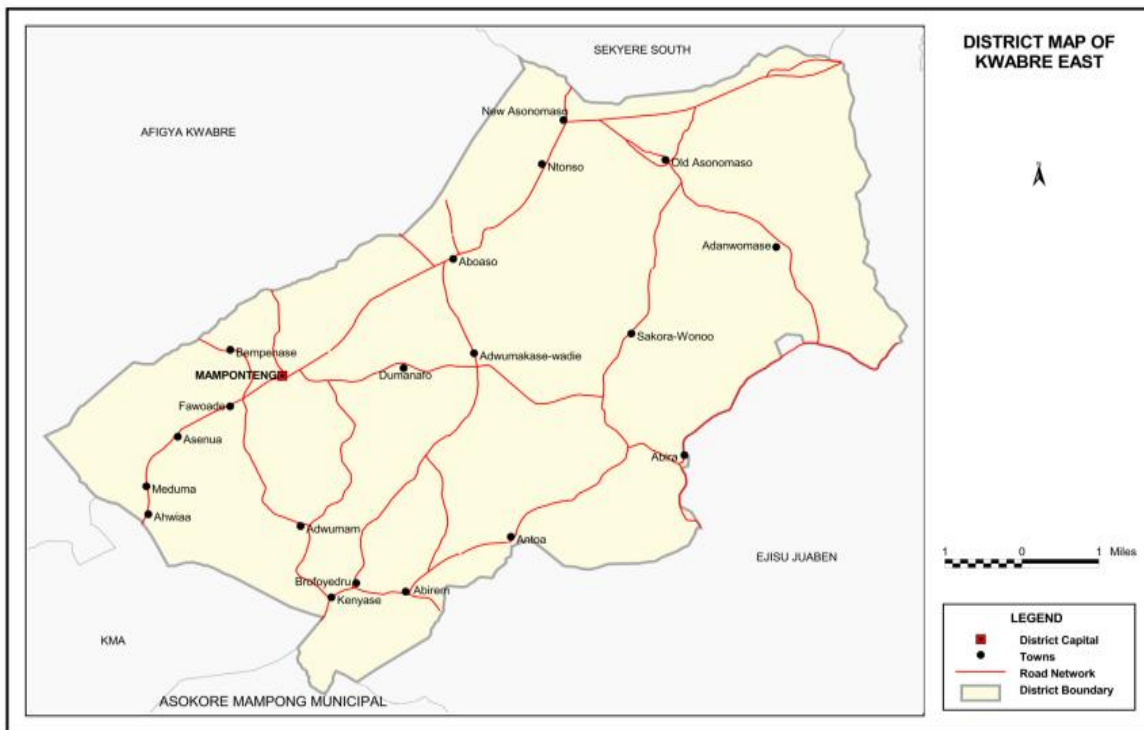


Figure 3.1: Map of Kwabre East Municipality

Source: Ghana Statistical Service, Geographic Information System (2017)

3.2.1 Climate of the Area

The Municipality is situated in the double-rainfall Wet Semi-Equatorial Climatic Region. April to June is the start of the first rainy season, with June being the wettest month. Between September and October is the second rainy season. Vegetable and food crops can be grown twice a year thanks to the Municipality's double rainfall pattern. Beginning in November and lasting until February is the dry season. The average annual rainfall is between 125 and 175 millimeters, with relative humidity varying between 75 and 80 percent during the wet season and 70 to 72 percent during the dry season. The annual average temperature is roughly 30°C, with the lowest temperature being around 25°C (Debrah, 2010).

The topography of the Municipality exhibits a variety of patterns, with large isolated hilly outcrops and land heights ranging from 305 to 335 meters above sea level in the eastern portion, while the western boundary is primarily undulating with areas below 290 meters above sea level. The Municipality is also well-drained, with several streams that originate in the eastern highlands and flow southeast as well as in the western rocky hills and exhibit dendritic patterns. The majority of notable streams, including Akawsua, Anyinasu, Daku Wiwi, Ayiresua, Owai, Atonsu, Akasu, Krowa, and Afiam, are perennial (Debrah, 2010).

3.2.2. Political structure

The highest political, administrative, and policy-making body of the Municipality is the Kwabre Municipal Assembly, which represents the entire political and administrative structure of the Central Government at the local level. The political head of the assembly is the Municipal Chief Executive. In addition, the Municipality has one national electoral district, 31 electoral areas, and 44 Assembly members, of which 13 are chosen by the President

ent after consulting with the Municipal's chiefs and interest groups and 31 are chosen by universal adult suffrage(Kwabre east district report, 2019).

The renowned Antoa shrine can be found in the Municipal. Abira is renowned for training fetish priests as well. The Asantehene, the King of the Asantes, is directly responsible for some traditional rulers in the Municipality, known as "Abrempong," while Kumasi Traditional Chiefs are in charge of Swedru and are heavily reliant on them. Preeminent chiefs like Mampong and Nsuta belong to the third category of traditional leaders (Debrah, 2010).

3.2.3. Land Acquisition system

The traditional authorities are the owners of the land in the Municipal. On either the abunu or abusa systems, those who want to farm are given the land to cultivate. According to the 2021 PHC, the Municipal is largely homogenous, with Akans making up about 69.8% of the entire population. Christians make up the majority of the population (78.5%) and are the most prevalent religion. Along with being significant, Muslims make up 16.5 percent of the population, while Traditionalists make up 0.5 percent(Ghana Statistical Service, 2021).

3.2.4 The Population

According to the 2021 Population and Housing Census, there were 115,556 people living in the Municipality, with 60,450 women and 55,106 men (47.7% and 52.3%, respectively). With a projected growth rate of 2.2%, the population in 2029 would be 139,588 with 68,710 men and 70,878 women. Rural areas are home to 42% of the population. The sex ratio in the Municipality is 91.2. The Municipality's population is largely young (39%), with only a small proportion of elderly people (3.4%), and a broad base population pyramid that flattens off. The municipality as a whole has an age dependency ratio of 74.6, with males having a higher rate (78.6) than females (71.1)(Ghana Statistical Service, 2021).

Total fertility in the municipality is 3.4. For women in this age range, there are 102.6 births per 1000. The crude birth rate (CBR) for the population is 28.2 per 1000. The crude death rate in the Municipal is 4.6 per 1000. Accidents, violence, homicide, and suicide accounted for 15.4% of all fatalities in the Municipal, while other causes account for 84.6 percent of fatalities. In the Municipality, 69.8% of immigrants were born in the Ashanti Region, and 28.9% were born in another Region. Among immigrants from other regions, those from Brong Ahafo make up 26.1% of all migrants, followed by Central Region (13.1%) and Northern Region (12.9%)(Ghana Statistical Service, 2021).

3.4.5. Household

There are 27,122 households in the Municipal, with 113,350 people living in them. In the Municipal, there are 4.2 people per household on average. With 43.8 percent of the total household structure, children make up the majority. About 10.2 percent are married couples. Nuclear households make up 29.6% of all households in the Municipality, which includes the head, spouse(s), and children (Debrah, 2010).

3.4.6. Marital Status

In comparison to the 44.9 percent of people who have never been married, 9.3 percent who are in consensual relationships, 4.2 percent who are widowed, 3.7 percent who are divorced, and 1.7 percent who are living apart, 36.2 percent of people aged 12 and older who are married are married. By the time they are 25 to 29 years old, nearly half of the Municipal's female population is married (48.3% versus 24.0 of their male counterparts). At age 65 and older, widowed females make up up to 60.1 percent of the population, while widowed males make up just 9.9 percent. 18.1 percent of married people and 4.5 percent of single people do not have any formal education. Nearly eighty percent (78.6%) of married people are in the

labor force, 4.7 percent are unemployed, and 16.7 percent are not participating in the economy. With 6% of them being unemployed, a higher percentage of those who have never been married (63,9%) are economically inactive. 23.4 percent of people who are 15 years of age and older are not employed, compared to 67.3 percent who are. Ninety-six percent of those who are economically active are employed, compared to 9.4 percent who are unemployed. A significant portion of students (52.0%), people who take care of their own homes (23.4%), and people who are unable to work (3.5%) make up the group of people who are not engaged in the economy. For the first time, six out of ten unemployed people are looking for work (Debrah, 2010).

3.4.7. Occupational status

Approximately 8.3% of the working population is employed as skilled labor in the agricultural, forestry, and fishing industries, with service and sales making up the next 33.5% of jobs, followed by craft and related trades at 25.4%, and management, professional, and technical occupations at 2.5%. Once more, among people aged 15 and older, 68.9% are self-employed without employees, 15.4% are family members who work part-time, 2.1% are temporary workers, and 0.5% are domestic workers (house helps). Men occupy the majority of all occupations, with the exception of apprentices and workers who support their families. The Municipal's private informal sector employs 94.2% of the population, with the public sector making up the remaining 3.7 percent (Ghana Statistical Service, 2021).

3.4.8. Educational Status

Currently, there are 136 JHS schools, 9 SHS schools, 169 pre-schools, and 170 primary schools in the Municipality. Additionally, the Municipality is home to one private university. The Free Senior High School Program is available to all 6 public senior high schools in the

municipality. The National School Feeding Program benefits 32 elementary schools in the Municipality(Ghana Statistical Service, 2021).

3.4.9. Health Infrastructure and Status

There are 18 healthcare facilities in the municipality, including 5 health centers, 4 clinics, 1 mission health center, 2 private hospitals, 1 government hospital, and 5 maternity homes. 349 nurses, 5 physician assistants, 3 medical doctors, and other healthcare providers are present(Kwabre East Municipal Assembly, 2019). The Municipality is not exceptional when it comes to promoting adolescent sexual and reproductive health (ASRH) service usage, which is still a global public health challenge. However, the high proportion of adolescents in low- and middle-income countries and the rising rates of HIV, unintended pregnancy, maternal deaths, and unsafe abortion also highlight the need for greater improvements in service utilization. Several teenagers in the Municipality underuse SRH services as a result of issues like service costs and travel time, ignorance of where to obtain STI treatment and contraceptives, awkwardness, a lack of confidentiality and anonymity, and unfavorable supplier attitudes. This evidence is supported by the region's 19% contraceptive prevalence rate, suggesting that premarital sex stigma prevents some teenagers from seeking SRH services (Kwabre East Municipal Assembly, 2019).

3.5. Target Population

Adolescents (15–19 years old) enrolled in senior high schools in the Kwabre East Municipality make up the study's target population. In the study area, there are nine senior high schools, with three private and six public, according to the Kwabre East Municipal Education Service. Five (5) senior high schools made up the sample frame from which the participants were selected.

3.6. Sampling size determination and Procedure

Based on the total number of senior high school students (9,540) enrolled in the five senior high schools in the municipality and a 95% confidence level and a 5% margin of error, an estimated sample size was calculated. Using the Yamane formula from 1967:

$n = N / (1 + N(e)^2)$ where;

n, signifies the sample size

N, signifies the total population under study

e, signifies the margin of error (0.05)

Allowing non-response rate of 10%, Four hundred and Twenty-two (422) participants from the five (5) public Senior High schools in SHS 1 to SHS 3 within Kwabre East Municipality was selected and questionnaires was administered to them using simple random sampling taking into consideration proportionate to size to be able to get equal representation of all the five (5) senior high schools for the study.

A two-stage sampling was employed. First, purposive sampling method was used to select five schools out of nine. This was done by writing the names of all nine schools in the district on a sheet of paper and grouping them according to schools in which teenage age pregnancies

occur most and purposively selecting five schools namely Adanwomase SHS, Adventist Girls SHS, Kofi Adjei SHS, Gyamaa Pensan SHS and Simms SHS. These schools were selected because data from (Ghana Health service, 2020) revealed that majority of the teenage pregnancies that occurred in Ashanti region occur in the district and most adolescents attend any one of the above schools.

Secondly, simple random sampling was used select participants from each of the five schools. This was done in a way where a lottery method was employed in each of the five (5) schools by labelling pieces of paper 1 and 0 . First, each member (those that agreed to participate) in each of the schools was made to choose and, after which those who selected 1 were chosen for the study taking into consideration proportionate to size (the sample size required divided by the overall population and multiplied by each school's population). The population sums up to be 422 participants that was given the Questionnaire however 395 was completed and returned. The sample is random because each participant in every senior high school was given an equal chance of being chosen.

SCHOOL	NUMBER OF RESPONDENTS
ADANWOMASE SHS	133
ADVENTIST GIRLS SHS	70
GYAMAA PENSAN SHS	67
SIMMS SHS	67
KOFI ADJEI SHS	58
TOTAL	395

3.7. Data Collection Instruments and Data Collection Procedure

Data collection was done using a structured questionnaire. The data collection instruments was adopted from a similar study by Abdul-Razak, (2016) and adjusted to meet the goals of this study since it has been tested and proven to have achieved its purpose. The structured questionnaire used contained specifically 41 questions and was made up of four sections: Section A dealt with questions on socio-demographic characteristics information of the respondents; Section B entailed questions on knowledge on contraception; Section C contained questions on attitudes towards contraceptive use and Section D also focused on questions on the uptake of contraceptives amongst respondents.

The questionnaire was administered with the aid of two (2) trained field assistants who were abreast with study objectives. Only those willing to participate in the study were allowed or permitted. The field assistants who help in the data collection observed all Covid-19 protocols by wearing nose masks and ensuring social distancing as well as provided each respondent a pen to be used to respond to the questionnaires. This was done in all the five (5) schools. Again, the errors detected were corrected in the presence of the respondents to ensure the data was cleaned and accurate. The questionnaires were numbered for data entry to proceed so that no response is double-entered. The researcher then entered the data into Statistical Package for Social Sciences (SPSS) version 21.0 to be edited and cleaned.

3.8. Inclusion Criteria

All student in the selected five (5) senior high schools in the Kwabre east municipality between the ages of 15 and 19 and is willing to take part in the study is eligible.

3.9 Study Variables

3.9.1 Dependent/ Outcome Variable

The dependent variable is uptake of contraceptive.

3.9.2 Independent Variables

Knowledge of Contraceptive: Respondents' knowledge on contraceptives: purpose of contraceptives; persons eligible to use contraceptives; available contraceptive methods.

Attitudes towards Contraceptive use: Respondents' beliefs and perceptions on: safety of contraceptive methods; cultural beliefs; partner support for contraceptive use. Co-variables such as age, sex, educational level, etc. will also be measured.

3.10. Quality Assurance

The literature on the subject of the study ensured the creation of research instruments that assisted in the collection of reliable data, ensuring the validity of the data and the conclusions drawn from it. Additionally, the ethical clearance committee and my supervisor reviewed the research instrument that resulted from this literature review for both content and face validity.

The questionnaires were adopted from similar reliable studies of (Agbanyo, 2018; Awabu, 2021; Cobbold, 2018) and modified. The questionnaires were then pre-tested using a different school with similar characteristics as one of the study schools to check for accurateness and valid data collected. The training of field assistants and strict on-field supervision were given special attention during the actual data collection. In the field, questionnaire accuracy was verified. In addition to data entry, a comprehensive data cleaning exercise was performed.

3.11. Presentation of Data Analysis

During the data collection, the questionnaires were revised and checked for completeness. Following the completion of the data collection, the questionnaires were coded and entered for processing into the Statistical Package for Social Sciences (SPSS) version 21.0 program. To examine the data, descriptive and inferential statistics were employed. Additionally, student t-tests were used to analyze continuous variables, and statistical analysis such as chi-square was used to determine relationships between categorical variables. In order to identify factors linked to the use of contraceptives, logistic regression was also performed with Uptake of contraceptives as the outcome variable and age, sex, form, religion, who they discuss FP with etc. as covariates. Covariates were included in the analyses to account for or control for their potential effects on the outcome variable. They are often used to reduce the influence of confounding variables in order to help identify the true effect. The strength of the association was determined using odds ratios with a 95% confidence level and a p-value less than 0.05.

3.12. Ethical Considerations

To comply with all the ethical requirements necessary to conduct research, the following ethical guidelines were pursued. First, complete copies of the research proposal was sent to the KNUST ethical review board for evaluation and clearance along with a number of approval (CHRPE/AP/141/22). Second, official letters asking for permission to conduct the study were sent to the Kwabre East Municipal Education Directorate and the various Senior High Schools in the Municipal. The participants were informed of the goal of the study once more in order to guarantee informed consent and participation in the recruitment processes. All participants provided their verbal, written, or assent consent after receiving appropriate

information; the generated data was then anonymized. Each piece of data was kept in a secure cloud storage facility and locked filing cabinets.

CHAPTER FOUR

RESULTS

4.1. Introduction

In this chapter, the study's findings are presented. It focuses on the study's objectives, first examining the sociodemographic details of the respondents before moving on to their knowledge of contraceptives, attitudes toward using them, prevalence, and predictors of doing so.

4.2. Socio-Demographic Characteristics of Respondents

A total of 422 questionnaires were administered to the students however, 395 responded signifying a 93.6% response rate. Out of these, 133(33.7%), 58(14.7%), 67(17.0%), 70(17.7%), and 67(17.0%) students were from Adanwomase SHS, Kofi Adjei SHS, Gyamaa Pensan SHS, Adventist Girls SHS, and Simms SHS respectively. The more than half of the students 275(69.6%) were females and 120(30.4%) were males. Those that responded most 145 (36.7%) were aged 17 years and out of these, those in form 2 responded most 252 (63.8%). Out of the total number of respondents, 318 (80.5%) were boarders and 77(19.5%) were day students. Most of the respondents 342 (86.6%) were Christians when asked about their religion. With regard to ethnicity, majority of the respondents 321(81.3%) were Asante. More than half of the respondents revealed that they stay with their parents 209 (52.9%). 232(58.7%) respondents indicated that they never discussed issues concerning sex with those they live with. However, 184 (46.6%) of the respondents revealed they are able to discuss sex issues with their peers. More than half of the respondents 243(61.5%) indicated that they were not in a relationship whiles 152(38.5%) said they were in a relationship. Table 4.1 provides more information.

Table 4.1: Socio-demographic characteristics of respondents

Variable	Frequency (n)	Percentage (%)
Name of Senior High School (SHS)		
Adanwomase SHS	133	33.7
Kofi Adjei SHS	58	14.7
Gyamaa Pensan SHS	67	17.0
Adventist Girls SHS	70	17.7
Simms SHS	67	17.0
Total	395	100.0
Sex		
Male	120	30.4
Female	275	69.6
Total	395	100.0
Age		
15 years	23	5.8
16 years	87	22.0
17 years	145	36.7
18 years	100	25.3
19 years	40	10.1
Total	395	100.0
Forms		
Form 1	75	19.0
Form 2	252	63.8
Form 3	68	17.2
Total	395	100.0
Student Status		
Day	77	19.5
Boarder	318	80.5
Total	395	100.0
Religion		
Christianity	342	86.6
Islamic	52	13.2
Traditional	1	0.3
Total	395	100.0
Ethnicity		
Asante	321	81.3
Dagomba	9	2.3
Ewe	12	3.0
Fante	9	2.3
Ga	7	1.8
Hausa	9	2.3
Kotokuli	5	1.3
Others	23	5.8
Total	395	100.0
Who do you stay with?		

Mother	109	27.6
Father	17	4.3
Parents	209	52.9
Guardian	15	3.8
Grandparent	23	5.8
Siblings	9	2.3
Aunty/Uncle	13	3.3
Total	395	100.0
How often are you able to discuss issues concerning sex with him/her?		
Never	232	58.7
Once a week	97	24.6
Once a month	49	12.4
Quarterly	8	2.0
Yearly	9	2.3
Total	395	100.0
Who are you able to discuss sex issues with?		
Siblings	30	7.6
Peers	184	46.6
Teacher	22	5.6
Parents	132	33.4
Social media	27	6.8
Total	395	100.0
Are you currently in a relationship?		
Yes	152	38.5
No	243	61.5
	395	100

*Others: Akuapem, Banda, Bimoba, Bono, Busanga, Dagaate, Frafra, Gonja, Grumah, Guans, Komkomba, Kusaase, Mamprusi, Sisala, and Waala

Source: Field survey, 2022

4.3 Knowledge of students on contraceptives

Table 4.2 displays the students' knowledge of contraceptives. The vast majority of the 226 participants (57.2%) stated that preventing pregnancy was the main reason they used contraceptives. Once more, 155 respondents (39.2%) stated that contraceptives are intended for anyone who engages in sexual activity. 163 respondents (41.3%) said that the media is their primary information source on using contraceptives. More than half of the respondents 223 (56.5%) inquire or learnt about sexual relationship from their peers. Almost all the respondents 353 (89.4%) have heard about family planning methods before. Majority of the

students 306(85%) knew condoms, 258(71.7%) knew about the natural family planning methods, 226(62.8%) knew oral contraceptive pill, 157(43.6%) knew injectable, 143(39.7%) knew emergency contraceptives, 133(36.9%) knew the female sterilization, 110(30.6%) knew implants, 100(27.8%) knew IUDs and 109(30.3%) knew male sterilization. Majority of the respondents 264(66.8%) strongly agreed that they know their sexual and reproductive rights.

Table 4.2: Knowledge of students on contraceptives

Variables	Frequency (n)	Percentage (%)
What is the main purpose of contraceptive?		
To plan and space pregnancies	150	38.0
Use for preventing child birth	226	57.2
Used for enjoying sex	19	4.8
Total	395	100.0
Who is eligible to use contraceptive?		
Adults	109	27.6
Married couples	99	25.1
Anyone who is sexually active	155	39.2
None	32	8.1
Total	395	100.0
Source of information		
Media	137	34.7
Peers	131	33.2
Siblings	8	2.0
Teachers	79	20.0
Parents	40	10.1
Total	395	100.0
My information on contraceptive use comes from		
Media	163	41.3
Peers	121	30.6
Teachers	74	18.7
Siblings	7	1.8
Parents	20	5.1
None	10	2.5
Total	395	100.0
From who do you learn or inquire about sexual relationships?		
Peers	223	56.5

Parents	43	10.9
Teachers	44	11.1
Siblings	10	2.5
Media	75	19.0
Total	395	100.0
Have you heard of family planning methods before?		
Yes	353	89.4
No	42	10.6
Total	395	100.0
Family planning methods students know		
Injectables	157	43.6
Intra uterine device	100	27.8
Natural family planning methods	258	71.7
Implants	110	30.6
Emergency contraception	143	39.7
Female sterilization	133	36.9
Male sterilization	109	30.3
Condoms	306	85.0
Oral contraceptives pill	226	62.8
Total	395	100.0
I know my sexual reproductive rights		
Strongly disagree	51	12.9
Disagree	27	6.8
Neutral	53	13.4
Agree	139	31.6
Strongly agree	125	31.6
Total	395	100.0

Source: Field survey (2022)

4.3.1 Knowledge level of SHS students on contraceptives

A total of 16 questions were used to assess the students' knowledge of contraceptives. A student who got a question correct was awarded a point. However, a student who failed to provide the correct answer received 0. Respondent who scored from 0 to 8 points was categorized as having poor knowledge. And respondents who scored from 9 to 16 points were grouped as those that have good knowledge. The study's findings showed that 272 students, or 68.9%, had a good knowledge base. However, 123 (31.1%) had low level of knowledge. Detailed information is provided in Table 4.3.

Table 4.3: Knowledge level of SHS students on contraceptives

Scores	Rating	Frequency (n)	Percentage (%)
0 – 8 points	Poor knowledge	123	31.1
9 – 16 points	Good knowledge	272	68.9
Total		395	100.0

Source: Field survey, (2022)

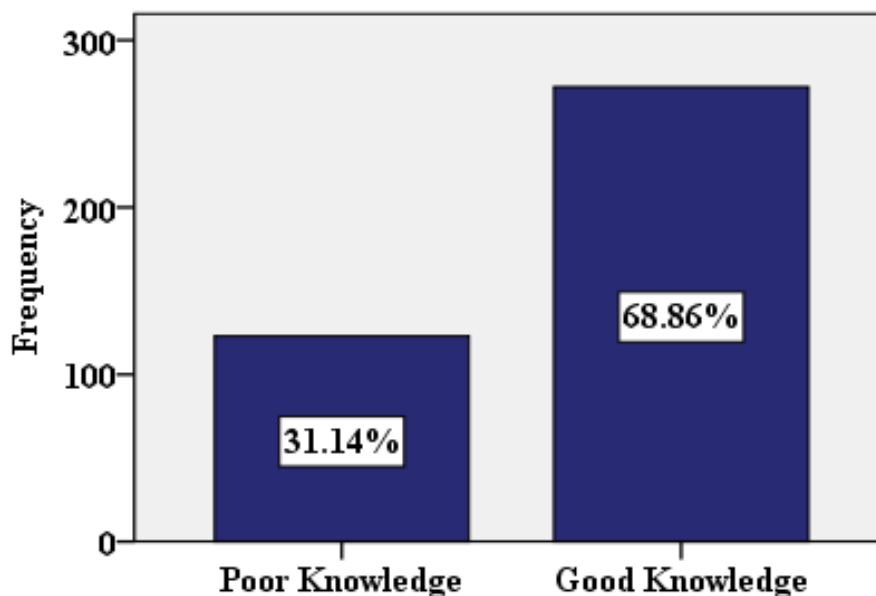


Figure 4.1: Knowledge level of SHS students on contraceptives

4.3.2 Distribution of knowledge level among respondents' characteristics

The study's findings indicated that students who were female (34.2%) had a higher proportion of inadequate knowledge on the use of contraceptives. The percentage of students who had good knowledge level on using contraceptives was higher among male students (75.8%). The study's findings showed a statistically significant association between students' sex and their respective knowledge of using contraceptives ($X^2 = 3.908$, $p = 0.048$).

Additionally, the results revealed that students who live with their mothers (39.4%) had a higher percentage of poor knowledge regarding the use of contraceptives. However, there was a higher percentage of students who live with their siblings (100.0%) who had good knowledge of using contraceptives. The findings showed a statistically significant association between respondents' relationships and their knowledge of the use of contraceptives ($X^2 = 12.745$, $p = 0.047$).

The result also indicated that students who are not currently in relationship (35.8%) had a higher proportion of poor knowledge on contraceptives usage. Nonetheless, students who are currently in relationship (76.3%) had a higher proportion of good knowledge on contraceptives usage. There was a statistically significant association between relationship and knowledge on contraceptives usage ($X^2 = 6.404$, $p = 0.011$). More information is shown in Table 4.4.

Table 4.4: Distribution of knowledge level among respondents' characteristics

Variable	Knowledge Level		Chi-Square (P-Value)
	Poor Knowledge n (%)	Good Knowledge n (%)	
Name of senior High School (SHS)			
Adanwomase SHS	33(24.8)	100(75.2)	5.840 (0.211)
Kofi Adjei SHS	18(31.0)	40(69.0)	
Gyamaa Pensan SHS	20(29.9)	47(70.1)	
Adventist Girls SHS	25(35.7)	45(64.3)	
Simms SHS	27(40.3)	40(59.7)	
Sex			
Male	29(24.2)	91(75.8)	3.908 (0.048)
Female	94(34.2)	181(65.8)	
Age			
15 years	9(39.1)	14(60.9)	4.384 (0.357)
16 years	28(32.2)	59(67.8)	
17 years	46(31.7)	99(68.3)	
18 years	33(33.0)	67(67.0)	
19 years	7(17.5)	33(82.5)	

Forms			
Form 1	27(36.0)	48(64.0)	1.191
Form 2	77(30.6)	175(69.4)	(0.551)
Form 3	19(27.9)	49(72.1)	
Student Status			
Day	23(29.9)	54(70.1)	0.072
Boarder	100(31.4)	218(68.6)	(0.789)
Religion			
Christianity	105(30.7)	237(69.3)	0.776
Islamic	18(34.6)	34(65.4)	(0.678)
Traditional	0(0.0)	1(100.0)	
Who do you stay with?			
Mother	43(39.4)	66(60.6)	12.745
Father	4(23.5)	13(76.5)	(0.047)
Parents	65(31.1)	144(68.9)	
Guardian	3(20.0)	12(80.0)	
Grandparent	3(13.0)	20(87.0)	
Siblings	0(0.0)	9(100.0)	
Aunty/Uncle	5(38.5)	8(61.5)	
How often are you able to discuss issues concerning sex with him/her?			
Never	77(33.2)	155(66.8)	1.484
Once a week	29(29.9)	68(70.1)	(0.829)
Once a month	13(26.5)	36(73.5)	
Quarterly	2(25.0)	6(75.0)	
Yearly	2(22.2)	7(77.8)	
Who are you able to discuss sex issues with?			
Siblings	10(33.3)	20(66.7)	7.676
Peers	50(27.2)	134(72.8)	(0.104)
Teacher	12(54.5)	10(45.5)	
Parents	44(33.3)	88(66.7)	
Social media	7(25.9)	20(74.1)	
Are you currently in a relationship?			
Yes	36(23.7)	116(76.3)	6.404
No	87(35.8)	156(64.2)	(0.011)

Source: Field survey, 2022

4.4 Attitude of adolescents in SHS toward contraceptive usage

Table 4.5 shows Attitude of adolescents in SHS toward contraceptive usage. Only 115 respondents (29.1%) said it would be simple for them to walk into a medical/health facility to ask for contraception. Almost half of the respondents 170(43.0%) agreed that contraceptives benefits males also. More than a quarter of the respondents 125(31.6%)

agreed that contraceptive methods can safeguard the family's and the community's health. Less than half of the respondents 148(37.5%) strongly agreed that religious beliefs can prevent contraceptive usage and 149(37.7%) of the participants also agreed that cultural beliefs can prevent contraceptive use by people. Moreover, 103(26.1%) of the participants pointed out that they are not worried about pregnancy so they do not use contraceptives. It was revealed by 111(28.1%) students that they strongly agreed that contraceptives are very safe. Majority of the respondents 217(54.9%) strongly agreed that females must remain a virgin till marriage. Less than half of the respondents 173(43.8%) revealed they can discuss contraceptive issues with their partners.167(42.3%) of the respondents indicated that contraceptive use promotes promiscuity. Almost half of the students 189(47.8%) reported that they use contraceptive to prevent sexually transmitted diseases. More information is in Table 4.5.

Table 4.5: Attitude of adolescents in SHS toward contraceptive usage (n = 395)

Variable	Strongly agree	Agree	Neutral	Disagree	Strongly disagree
I can easily walk into a health facility and ask for contraception	92(23.3)	115(29.1)	102(25.8)	49(12.4)	37(9.4)
Contraceptives benefit males too	99(25.1)	170(43.0)	60(15.2)	45(11.4)	21(5.3)
Contraceptives methods can protect the health of family and community	88(22.3)	125(31.6)	65(16.5)	77(19.5)	40(10.1)
Religious beliefs can prevent people from using contraceptives	148(37.5)	139(35.2)	37(9.4)	42(10.6)	29(7.3)
Cultural beliefs can prevent people from using contraceptives	103(26.1)	149(37.7)	44(11.1)	66(16.7)	33(8.4)
I don't use contraceptives because I am not worried about	90(22.8)	103(26.1)	60(15.2)	83(21.0)	59(14.9)

pregnancy or my partner getting pregnant					
Contraceptives are very safe	111(28.1)	105(26.6)	50(12.7)	73(18.5)	56(14.2)
Females must remain a virgin till marriage	217(54.9)	100(25.3)	27(6.8)	24(6.1)	27(6.8)
I can discuss contraceptive issues with my partner	137(34.7)	173(43.8)	54(13.7)	11(2.8)	20(5.1)
Family planning promotes sexual promiscuity	95(24.1)	167(42.3)	60(15.2)	49(12.4)	24(6.1)
I use condoms to prevent sexually transmitted diseases	189(47.8)	139(34.4)	34(8.6)	11(2.8)	25(6.3)

Source: Field survey, 2022

4.4.1 Attitude level of SHS on Contraceptive usage

The attitude of the students was assessed with 12 questions. A respondent who got a question correct was awarded 1 point. Notwithstanding, a student who answered incorrectly received a score of 0. Poor-attitude students were those who received a score of 0 to 6. Students were considered to have a good attitude if they received a point total between 7 and 12. 342 of the students, or 86.6%, had a favorable attitude toward using contraception. Nonetheless, 53(13.4%) had poor attitude toward contraceptive usage. Table 4.6 provides more information.

Table 4.6: Attitude level of SHS on Contraceptive usage

Scores	Rating	Frequency (n)	Percentage (%)
0 – 6 points	Poor attitude	53	13.4
7+ points	Good attitude	342	86.6
Total		395	100.0

Source: Field survey, (2022)

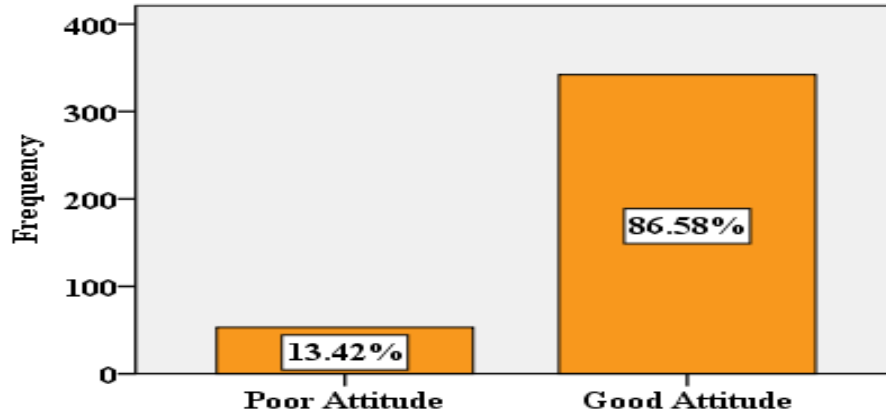


Figure 4.2: Attitude of SHS students toward contraceptive usage

4.4.2 Distribution of attitude towards contraceptives usage among respondents' characteristics

The study revealed that students from Simms SHS (28.4%) had a higher proportion of poor attitude toward contraceptives usage. However, students from Kofi Adjei SHS (93.1%) had a higher proportion of good attitude towards contraceptives usage. According to the findings, there is a statistically significant link between where the students attend school and their attitudes toward using contraceptives ($X^2 = 22.685$, $p < 0.001$).

Additionally, students who discussed sex issues with their teachers (36.4%) had a higher proportion of poor attitude towards contraceptives usage. Nevertheless, students who discussed issues of sex with their peers (92.4%) had a higher proportion of good attitude towards contraceptives usage. There was a statistically significant association between the students' attitudes toward using contraceptives and who they discussed sex with ($X^2 = 18.567$, $p = 0.001$). Lastly, students who were not in relationship had a higher proportion of poor attitude towards contraceptive usage. However, students who were in relationship had a higher proportion of good attitude towards contraceptives usage. The link between attitude

toward contraceptives use and relationship was statistically significant ($X^2 = 3.765$, $p = 0.052$). Table 4.7 contains more information.

Table 4.7: Distribution of attitude towards contraceptives usage among respondents' characteristics

Variable	Attitude Level		Chi-Square (P-Value)
	Poor Attitude n (%)	Good Attitude n (%)	
Name of senior High School (SHS)			
Adanwomase SHS	11(8.3)	122(91.7)	22.685 (< 0.001)
Kofi Adjei SHS	4(6.9)	54(93.1)	
Gyamaa Pensan SHS	5(7.5)	62(92.5)	
Adventist Girls SHS	14(20.0)	56(80.0)	
Simms SHS	19(28.4)	48(71.6)	
Sex			
Male	19(15.8)	101(84.2)	0.866 (0.352)
Female	34(12.4)	241(87.6)	
Age			
15 years	1(4.3)	22(95.7)	7.968 (0.093)
16 years	9(10.3)	78(89.7)	
17 years	27(18.6)	118(81.4)	
18 years	9(9.0)	91(91.0)	
19 years	7(17.5)	33(82.5)	
Forms			
Form 1	12(16.0)	63(84.0)	4.101 (0.129)
Form 2	37(14.7)	215(85.3)	
Form 3	4(5.9)	64(94.1)	
Student Status			
Day	12(15.6)	65(84.4)	0.386 (0.534)
Boarder	41(12.9)	277(87.1)	
Religion			
Christianity	43(12.6)	299(87.4)	1.878 (0.391)
Islamic	10(19.2)	42(80.8)	
Traditional	0(0.0)	1(100.0)	
Who do you stay with?			
Mother	20(18.3)	89(81.7)	6.654 (0.354)
Father	4(23.5)	13(76.5)	
Parents	24(11.5)	185(88.5)	
Guardian	2(13.3)	13(86.7)	
Grandparent	2(8.7)	21(91.3)	
Siblings	0(0.0)	9(100.0)	
Aunty/Uncle	1(7.7)	12(92.3)	

How often are you able to discuss issues concerning sex with him/her?			
Never	30(12.9)	202(87.1)	3.086
Once a week	15(15.5)	82(84.5)	(0.544)
Once a month	4(8.2)	45(91.8)	
Quarterly	2(25.0)	6(75.0)	
Yearly	2(22.2)	7(77.8)	
Who are you able to discuss sex issues with?			
Siblings	7(23.3)	23(76.7)	18.567
Peers	14(7.6)	170(92.4)	(0.001)
Teacher	8(36.4)	14(63.6)	
Parents	19(14.4)	113(85.6)	
Social media	5(18.5)	22(81.5)	
Are you currently in a relationship?			
Yes	14(9.2)	138(90.8)	3.765
No	39(16.0)	204(84.0)	(0.052)

Source: Field survey, 2022

4.5 Contraceptives usage among adolescents

Table 4.8 shows the uptake of contraceptives among respondents in SHS. It was indicated by 135(34.2%) of the respondents that they would go in for contraceptives before or after sex. Majority of the respondents 269(68.1%) have never used any contraceptive method before. The respondents who revealed they are not currently using contraceptives to avoid pregnancy were 22(17.5%). Again, 126(31.9%) of them indicated yes to currently using contraceptives to avoid pregnancy and out of these 98(77.8%) of the respondents indicated they decided with their partners. For those who indicated they are not currently using contraceptives, majority of them 184(70.5%) revealed their reason being fear of side effects. For those who indicated they are currently using contraceptives, half of the respondents 67(50%) are using condoms.

Regarding how frequently contraceptives are used, 20(15.8%) reported most often, 36(28.6%) indicated occasionally, 30(23.8%) reported during emergency and majority of the respondents 40(31.8%) indicated they don't use it often. Almost all the respondents

98(77.8%) revealed that they get their contraceptives from the chemical/pharmacy shops. In terms of how long adolescents have been using contraceptives, 215 (53.4%) said they had been doing so for less than a year, 146 (38.0%) said they had been doing so for one to two years, 31 (8.7%) said they had been using them for three to four years, and 3 (0.8%) said they had been using them for five years or longer. 26.2% of the 126 respondents said they had no justification for using the method they had chosen. 48(38.1%) indicated they use it due to minimal side effects. 14(11.1%) indicated they use it because it is affordable. 7(5.6%) indicated they use it for convenience and 24(19.0%) reported that they use the method because it is easy to use.

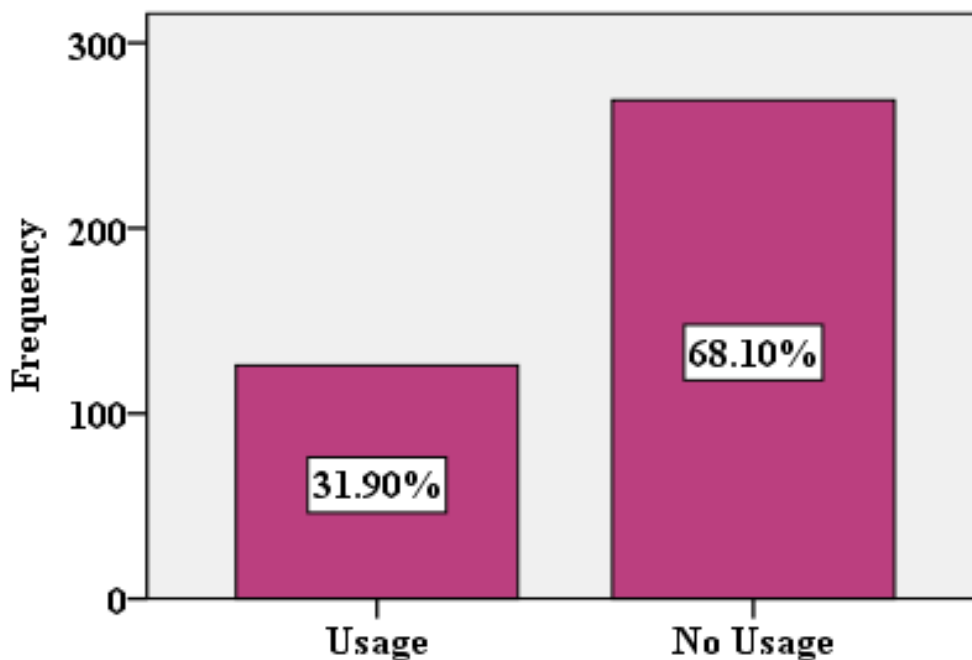


Figure 4.3: Contraceptives usage among SHS students

Table 4.8: Uptake of contraceptive among SHS students

Variables	Frequency (n)	Percentage (%)
Would you go in for contraceptives before or after sex?		
Yes	135	34.2
No	134	33.9
Maybe	126	31.9
Total	395	100.0
Ever used any contraceptive method before?		
Yes	126	31.9
No	269	68.1
Total	395	100.0
Are you currently using any method to avoid getting pregnant?		
Yes	104	82.5
No	22	17.5
Total	126	100.0
If yes, did you decide with your partner?		
Yes	98	77.8
No	28	22.2
Total	126	100.0
If no, why are you not using any method		
Desired for more children	15	5.7
Fear of side effect	184	70.5
Non-affordability	18	6.9
Lack of information	36	13.8
Lack of spousal consent	8	3.1
Total	261	100.0
If yes, which of the methods are you using		
Female sterilization	3	2.2
Injections	6	4.5
The pills	33	24.6
Implants	2	1.5
Condoms	67	50.0
Emergency contraception	12	9.0
Spermicide	1	0.7
None	10	7.5
Total	134	100.0
How often do you use contraceptives?		
Most often	20	15.8
Occasionally	36	28.6
When encounters with an emergency	30	23.8
Not often	40	31.8
Total	126	100.0
Where do you often get your contraceptives?		
Hospitals	16	12.7

Health centers or clinic	12	9.5
Chemical shops or pharmacies	98	77.8
Total	126	100.0
Specify other places you get contraceptives		
Clinic	7	1.8
Drug store	16	4.1
Friends	28	7.1
Health center	21	5.4
Herbalist	6	1.5
Home	3	0.8
Hospital	47	11.9
Partner	2	0.6
Pharmacies	30	7.6
Total	160	100.0
How long have you been using this method?		
Not use	215	53.4
1 year	74	18.7
2 years	72	18.3
3 years	23	5.9
4 years	8	2.0
5 years	3	0.8
Total	395	100.0
Reasons for using the method		
No reason	33	26.2
Minimal side effects	48	38.1
Affordable	14	11.1
Convenient	7	5.6
Easy to use	24	19.0
Total	126	100.0
Ever changed a contraceptive method before		
Yes	74	58.7
No	52	41.3
Total	126	100.0
If yes, why did you change the method?		
Side effects	43	58.1
Cost	20	15.9
Ineffectiveness of method	5	6.8
Perceived sickness	6	8.1
Total	74	100.0
Will you advise a friend or relative to use contraceptive?		
Yes	193	48.9
No	202	51.1
Total	395	100.0
My religion and cultural beliefs support contraceptive use		
Strongly disagree	168	42.5

Disagree	105	26.6
Neutral	40	10.1
Agree	50	12.7
Strongly agree	32	8.1
Total	395	100.0

Source: Field survey, (2022)

4.5.1 Uptake level of contraceptives among SHS students

The study adopted questions to assess the students' level of uptake of contraceptives. A student who got a question correct received a mark. However, a student who got a question wrong was awarded 0. Majority of the students (58.7%) had a lower uptake of contraceptive usage. However, 41.3% had high uptake of contraceptive usage. Figure 4.4 provides more information.

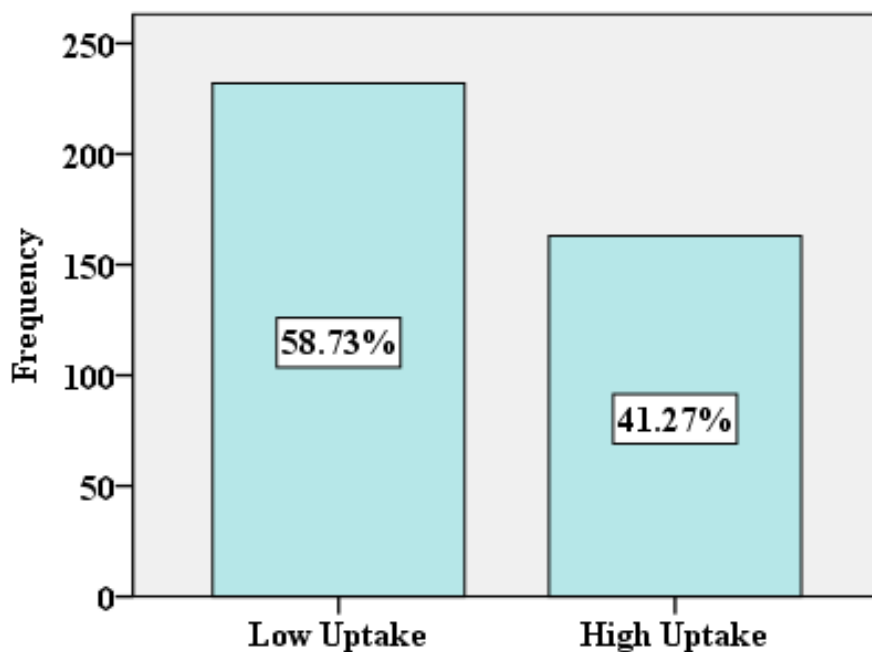


Figure 4.4: level of contraceptive uptake among SHS students

4.6 Distribution of uptake of contraceptives by students' characteristics

Students from Gyamaa Pensan SHS (86.6%) had a higher proportion of low usage. Again, students from Adanwomase SHS (58.6%) had a higher proportion of high usage of contraceptives. There was a statistically significant association between the school students attend and usage of contraceptives ($X^2 = 44.435$, $p < 0.001$). Male students had a higher proportion (64.0%) of lower usage of contraceptives as compared to female students. However, male students had a higher proportion (53.3%) of higher usage of contraceptives than female students. The findings revealed a statistically significant link between sex and contraceptive usage ($X^2 = 10.356$, $p = 0.001$).

Moreover, students in Form 3 had a higher proportion (70.6%) of low usage of contraceptives as compared to the rest of students in the other Forms as in (Form 1 and 2). However, students in Form 2 had a higher proportion (46.8%) of high usage of contraceptives as compared to the rest of the Forms. Forms of students and use of contraceptives were statistically highly associated ($X^2 = 9.103$, $p = 0.011$).

Students who discussed issues concerning sex yearly had a higher proportion (88.9%) of low uptake of contraceptives as compared to the other groups. However, students who discussed issues concerning sex once a week had a higher proportion (58.8%) of high uptake of contraceptive as compared to the other groups. The results revealed a statistically significant connection between the students' willingness to talk about sex-related subjects with their partners and their contraceptives usage ($X^2 = 24.732$, $p < 0.001$).

Students who are not in relationship had a higher proportion (74.1%) of low uptake of contraceptive than students who are in relationship. However, students who are in a relationship had a higher proportion (65.8%) of high uptake of contraceptives than students

who are not in relationship. The findings revealed a statistically significant link between being in a relationship and contraceptives usage ($X^2 = 61.309$, $p < 0.001$). Detailed information is showed in Table 4.9.

Table 4.9: Distribution of uptake of contraceptives by students’ characteristics

Variable	Uptake of contraceptives		Chi-Square (P-Value)	
	Low Uptake n (%)	High Uptake n (%)		
Name of senior High School (SHS)				
Adanwomase SHS	55(41.4)	78(58.6)	44.435 (< 0.001)	
Kofi Adjei SHS	43(74.1)	15(25.9)		
Gyamaa Pensan SHS	58(86.6)	9(13.4)		
Adventist Girls SHS	40(57.1)	30(42.9)		
Simms SHS	36(53.7)	31(46.3)		
Sex				
Male	56(46.7)	64(53.3)	10.356 (0.001)	
Female	176(64.0)	99(36.0)		
Age				
15 years	16(69.6)	7(30.4)	7.141 (0.129)	
16 years	56(64.4)	31(35.6)		
17 years	89(61.4)	56(38.6)		
18 years	53(53.0)	47(47.0)		
19 years	18(45.0)	22(55.0)		
Forms				
Form 1	50(66.7)	25(33.3)	9.103 (0.011)	
Form 2	134(53.2)	118(46.8)		
Form 3	48(70.6)	20(29.4)		
Student Status				
Day	41(53.2)	36(46.8)	1.188 (0.276)	
Boarder	191(60.1)	127(39.9)		
Religion				
Christianity	207(60.5)	135(39.5)	4.313 (0.116)	
Islamic	25(48.1)	27(51.9)		
Traditional	0(0.0)	1(100.0)		
Who do you stay with?				
Mother	61(56.0)	48(44.0)	1.025 (0.985)	
Father	11(64.7)	6(35.3)		
Parents	126(60.3)	83(39.7)		
Guardian	9(60.0)	6(40.0)		
Grandparent	13(56.5)	10(43.5)		
Siblings	5(55.6)	4(44.4)		
Aunty/Uncle	7(53.8)	6(46.2)		
Knowledge level of students on contraceptive uptake				

Poor Knowledge	78(63.4)	45(36.6)	1.614
Good Knowledge	154(56.6)	118(43.4)	(0.204)
Attitude of students towards contraceptive uptake			
Poor Attitude	33(62.3)	20(37.7)	0.315
Good Attitude	199(58.2)	143(41.8)	(0.575)
How often are you able to discuss issues concerning sex with him/her?			
Never	156(67.2)	76(32.8)	24.732
Once a week	40(41.2)	57(58.8)	(< 0.001)
Once a month	24(49.0)	25(51.0)	
Quarterly	4(50.0)	4(50.0)	
Yearly	8(88.9)	1(11.1)	
Who are you able to discuss sex issues with?			
Siblings	16(53.3)	14(46.7)	7.751
Peers	101(54.9)	83(45.1)	(0.101)
Teacher	12(54.5)	10(45.5)	
Parents	90(68.2)	42(31.8)	
Social media	13(48.1)	14(51.9)	
Are you currently in a relationship?			
Yes	52(34.2)	100(65.8)	61.309
No	180(74.1)	63(25.9)	(< 0.001)

Source: Field survey (2022)

4.7 Binary logistic regression analysis of factors associated with students' uptake of contraceptives

Variable	Crude Odds Ratio (95% Confidence Interval)	P – Value
Name of Senior High School (SHS)		
Adanwomase SHS	Reference	Reference
Kofi Adjei SHS	0.464(0.108 – 1.996)	0.302
Gyamaa Pensan SHS	0.107(0.043 – 0.264)	< 0.001
Adventist Girls SHS	0.563(0.298 – 1.063)	0.076
Simms SHS	0.495(0.252 – 0.970)	0.040
Sex		
Male	Reference	Reference
Female	0.769(0.469 – 1.260)	0.297
Forms		

Form 1	Reference	Reference
Form 2	0.852(0.431 – 1.683)	0.644
Form 3	0.469(0.103 – 2.134)	0.327
How often are you able to discuss issues concerning sex		
Never	Reference	Reference
Once a week	2.945(1.731 – 5.010)	< 0.001
Once a month	2.209(1.129 – 4.321)	0.021
Quarterly	2.310(0.487 – 10.957)	0.292
Yearly	0.249(0.029 – 2.158)	0.207
Are you currently in a relationship?		
No	Reference	Reference
Yes	5.495(3.535 – 8.541)	< 0.001

Source: Field Survey (2022)

4.8 Binary logistic regression analysis of factors associated with students' uptake of contraceptives

The odds of students who are 19 years using contraceptives were 2.32 (95% CI: 1.109 – 4.837) times likely as compared to students those in the ages of 15 to 16 years . There was a statistically significant association between Age and uptake of contraceptives.

When compared to male students, female students are 0.5 (95% CI: 0.319 – 0.760) times greater likely of using contraceptives. A statistically significant association were found between sex/gender and uptake of contraceptive.

The odds of students who are in Form 2 using contraceptives were 1.8 (95% CI: 1.026 – 3.023) times likely as compared to students in Form 1. There was a statistically significant association between students' Form/Level and uptake of contraceptives.

When compared to students who never discuss issues relating to sex with their parents, students who are able to do so once a week are 2.9 (95% CI: 1.795 - 4.767) times greater likelihood of using contraceptives. A statistically significant association were found between students who discuss issues concerning sex once a week. Again, the odds of students who discuss issues concerning sex with their parents once a month were 2.1 (95% CI: 1.146 – 3.989) as compared to students who never discuss issues concerning sex with their parents. The result found a statistically significant association between students who discuss issues concerning sex with their parents once a month and uptake of contraceptives.

The odds of students in relationship were 0.2 (95% CI: 3.535 – 8.541) times likely to use contraceptive as compared to students who are not in relationship. Students in relationships and use of contraceptives were statistically significantly associated. Detailed information is provided in Table 4.11 below.

Table 4.11: Binary logistic regression analysis of factors associated with students' uptake of contraceptives

Variable	Coefficient (β)	Adjusted Odds Ratio (95% Confidence Interval)	P – Value
Age (years)			
15 – 16	Reference	Reference	Reference
17 – 18	0.318	1.374(0.861 – 2.194)	0.183
19	0.840	2.316(1.109 – 4.837)	0.025
Sex			
Male	Reference	Reference	Reference
Female	-0.709	0.492(0.319 - 0.760)	0.001
Forms			
Form 1	Reference	Reference	Reference
Form 2	0.566	1.761(1.026 – 3.023)	0.040
Form 3	-0.182	0.833(0.410 – 1.693)	0.614
Student Status			
Day	Reference	Reference	Reference
Boarder	-0.278	0.757(0.459 – 1.249)	0.277
Religion			
Christianity	Reference	Reference	Reference
Islamic	0.504	1.656(0.922 – 2.974)	0.091
Traditional	21.630	2.477(0.487 – 10.957)	1.000
Who do you stay with?			
Mother	Reference	Reference	Reference
Father	-0.366	0.693(0.239 – 2.009)	0.500
Parents	-0.178	0.837(0.524 – 1.338)	0.457
Guardian	-0.166	0.847(0.282 – 2.545)	0.768
Grandparent	-0.023	0.978(0.395 – 2.421)	0.961

Siblings	0.017	1.017(0.259 – 3.993)	0.981
Aunty/Uncle	0.086	1.089(0.343 – 3.454)	0.885
How often are you able to discuss issues concerning sex with him/her?			
Never	Reference	Reference	Reference
Once a week	1.073	2.925(1.795 – 4.767)	< 0.001
Once a month	0.760	2.138(1.146 – 3.989)	0.017
Quarterly	0.719	2.053(0.500 – 8.431)	0.318
Yearly	-1.360	0.257(0.032 – 2.089)	0.204
Who are you able to discuss sex issues with?			
Siblings	Reference	Reference	Reference
Peers	-0.063	0.939(0.433 – 2.036)	0.874
Teacher	-0.049	0.952(0.316 – 2.872)	0.931
Parents	-0.629	0.533(0.238 – 1.193)	0.126
Social media	0.208	1.231(0.434 – 3.487)	0.696
Are you currently in a relationship?			
Yes	Reference	Reference	Reference
No	-1.704	0.182(0.117 – 0.283)	< 0.001
Attitudes towards contraceptive usage			
Poor attitude	Reference	Reference	Reference
Good attitude	0.170	1.186(0.654 – 2.151)	0.575
Knowledge on contraceptives			
Poor knowledge	Reference	Reference	Reference
Good knowledge	0.284	1.328(0.857 – 2.059)	0.204

Source: Field Survey (2022)

4.9 Conclusion

The analysis of data on sociodemographic characteristics, knowledge, attitudes, and contraceptives use was the primary focus of this chapter. Predictors of uptake of contraceptives were also identified among respondents. The next chapter will discuss major findings in relation to related literature.

CHAPTER FIVE

DISCUSSION OF RESULTS

5.0. Introduction

Major findings are discussed in this chapter in relation to pertinent literature on the topic at hand. This study's objective was to look into the factors that influence adolescents' use of contraception in the various senior high schools in Kwabre East municipality.

5.1 Knowledge of students on contraceptives

272 students, or 68.9%, had a good knowledge of contraceptives. This suggests that SRH knowledge may have been disseminated to adolescents who were enrolled in schools during class time or through community outreach initiatives. Studies that found adolescents have a high level of knowledge about contraception are consistent with the current finding (Ochako et al., 2015; Hagan & Buxton, 2012). An study supports the recent finding that adolescents participating in the study had a good level of knowledge(98%) and awareness of contraceptives (Beson et al., 2018). Akyeah, (2007) also found that adolescents aged 15 to 19 had high contraceptive knowledge (91.7%). This outcome was once more comparable to those of an American study that showed 70.0% of adolescents (Guzzo & Hayford, 2018). A study conducted among young teens in Botswana, however, discovered an inadequate level of contraceptive knowledge (52.8%) among adolescents (Kgosiemang & Julia, 2018). Yet again, a study by Awabu, (2021) challenged the notion that adolescents have little to no knowledge of using contraceptives, and some even claimed not to be aware of them.

Almost all of the 226 survey participants (57.2%) claimed that the primary reason they used contraception was to prevent pregnancy. This suggests that adolescents' top priorities are probably preventing pregnancy and not delaying it or avoiding STIs while they are in school

to focus on their academic work. This recent finding corroborates Yidana et al., (2015) 's assertion that teenage girls seek out contraceptives primarily to avoid getting pregnant. In An earlier study conducted in Uganda by Becker et al., (2015), adolescents' knowledge of contraception, particularly among girls, is linked to the prevention of unintended pregnancy supports this current finding. However, the use of contraceptives has also been associated with a decrease in STIs among adolescents. According to a study by Beksinska et al., (2011), the use of condoms has been shown to be effective in preventing the transmission of STIs among adolescents. Therefore, the use of contraceptives by adolescents can help protect them from STIs and their associated negative effects. Adolescents are known to be sexually active and are at high risk of unintended pregnancy and sexually transmitted infections (STIs). The use of contraceptives has been shown to be effective in preventing unwanted pregnancy and STIs. In addition, the use of contraceptives among adolescents has been linked to better relationship quality. According to a study by Manlove and colleagues (2011), sexually active adolescents who used contraceptives reported better relationship quality than those who did not use them. This suggests that the use of contraceptives can improve communication and trust between partners, leading to better relationship outcomes. In conclusion, the use of contraceptives among adolescents has been associated with several benefits, including the prevention of unintended pregnancy and STIs, and the improvement of relationship quality. These findings suggest that promoting the use of contraceptives among adolescents can help improve their sexual and reproductive health outcomes.

The media is the primary source of information on the contraceptives and its use for the majority of the 163 participants (41.3%) in this study. According to a study by Asiedua Darko, (2016), the media is the main source of information. Both Yidana et al., (2015) and

Enuameh et al., (2014) reported findings that were similar, with the media playing a major role. 60% of respondents, according to Hagan & Buxton, (2012) research, learned about contraception from the media (television/radio). This current finding is in affirmation with another the findings of another study conducted by Somba et al., (2014) that found peers and radio to be the primary sources of contraceptives. According to Abdul-Razak, (2016)'s research, media advertisements have a positive impact on adolescents' knowledge of contraceptives. The current finding that the media is the most preferred information source for adolescents (79.8%) is also supported by a research of Gothwal et al., (2020). Additionally, according to a study conducted in Ghana, television and radio were the principal sources of information on teen contraceptive use (Boamah et al., 2014). Conversely, a study carried out in Nigeria discovered that health care professionals were the key source of contraception information for adolescents (Oye-Adeniran et al., 2005). In contrast to the current finding, a study by Buabeng et al., (2018) discovered that teachers were found to be the primary source of contraception information (31.16%), followed by health workers (27.27%). This current finding could mean that phones, laptops, radio, internet and social media are at the disposal of the adolescents thus, they might be privy to information on contraceptives. Studies have shown that media is the most preferred source for contraceptive information among young people. One of the reasons for this preference is the ease of access to information through various media platforms. Through television, radio, and social media, young people can access a wide range of information on contraceptives from the comfort of their homes. This is particularly important as traditional sources of contraceptive information, such as parents, teachers, and health workers, may be unavailable or too difficult to access for young people. Another reason why media is the most preferred

source for contraceptive information is that it guarantees anonymity. Adolescents may feel embarrassed or uncomfortable discussing issues related to sexuality with adults or peers. The media provides a safe space for them to learn about contraceptives without fear of judgment or discrimination. Research has also shown that media is a powerful tool in shaping attitudes and behaviors regarding sexuality and contraceptive use. Media can influence social norms and perceptions about sexuality, which can ultimately determine whether young people adopt contraceptive use or not. This is particularly important in societies where sexuality is considered a taboo topic, and contraceptive use is frowned upon. Finally, media is an effective tool for promoting contraceptive use among young people because it can provide a comprehensive understanding of the different contraceptive methods available. Through various media sources, young people can access accurate and detailed information about the effectiveness, side effects, and use of different contraceptive methods. This knowledge is critical in ensuring that young people make informed decisions about their reproductive health and avoid unintended pregnancies. In conclusion, media is the most preferred source for contraceptive information among young people because of its accessibility, anonymity, ability to shape attitudes and behaviors, and provision of accurate information about different contraceptive methods. Hence, effective use of media can play a significant role in promoting contraceptive use and reducing unintended pregnancies among young people.

Almost all 353 respondents (89.4%) knew about family planning methods. This study's outcome is comparable to that of the GDHS report from 2015, which showed that adolescents were well-versed in family planning methods used around the world (GDHS, 2015). This study's findings support those of Ojikutu et al., (2010), who found that female

adolescent students at Jimma University in southwest Ethiopia had a high knowledge level of family planning methods at 70.5%. However, this research contradicts a Brazilian study that found that adolescents (12–19 years old) in both private and public schools had a poor 30.2% knowledge of contraceptive methods (Martins et al., 2006).

Regarding family planning methods, the vast majority of students, 306 (85%), were aware of condoms and natural family planning methods, 258 (71.7%), while 226 (62.8%) were familiar with oral contraceptives. This result agrees with that of (Awusabo-asare et al., 2006), who found that adolescents (12–19 years old) in Ghana reported being aware of at least a method of contraception. 52.7% of females and 52.5% of males both knew what pills were. The male condom received the highest ratings from both men and women, scoring 87.9% and 90.6%, respectively. Adolescent were aware of contraceptives, but their knowledge was limited, which may have an impact on how often they use them because it will restrict their options. The study also supports the idea that simply mentioning or being aware of a particular method of contraception does not imply that one is fully informed about its usage, benefits, and side effects (Mendes et al., 2011).

5.2 Attitudes towards Contraceptive use

The majority of the 342 students' attitudes toward using contraceptives were positive (86.6%). The current research indicates that adolescents would prefer to use contraceptives to put off unplanned pregnancy and to avoid STIs so they can concentrate on their schoolwork. The majority of participants (63%) displayed a favorable attitude toward the use of modern contraceptives, which is in affirmation with the current discovered finding (Beson et al., 2018). Furthermore, the current study also supports the findings of Gothwal et al., (2020), who discovered that the vast majority of survey participants (71%) had a

favorable attitude toward family planning. To contrast with this study, a study by found that 59.3% of participants had a poor attitude (Der et al., 2021). Additionally, according to Kgosiemang & Blitz, (2018), the majority of respondents had a bad opinion of EC in Botswana. The assertion that 54.0 percentage of students had a positive attitude toward contraceptive use was debunked by (Fatima, 2021). The current finding that the use of modern contraceptives was not preferred due to adolescents' negative attitude toward contraceptives was also refuted by Ofori & Sam, (2020).

Majority of the respondents 217(54.9%) strongly agreed that female adolescents must remain a virgin till marriage. This implies that it is important to protect the girl's reputation in order to avoid making it challenging for her to find a spouse. Once more, this may indicate that female adolescents will devote all of their attention to their academic work until they are old enough to support a child and have jobs. Adolescent girls are expected by society to keep their virginity until they marry in Bangladesh, according to a study that confirms this recent finding (Rashid & Michaud, 2000). It was once again proven in a study by Matswetu & Bhana, (2018) that it was crucial for girls to maintain their virginity until marriage. However, this finding was disproved by (Motamedi et al., 2016), who found that 43% of the men believed it was crucial for a woman to be a virgin before marriage.

A little more than half of the students (189) (47.8%) said they use contraception to avoid STDs. It's possible that most adolescent are aware that STDs are spread through unprotected sexual activity based on their use of contraceptives. In their study, Beson et al., (2018) confirmed the current finding that individuals may prioritize using contraceptives if they are aware of the advantages, such as avoiding unintended pregnancies and STDs. The current finding that the most common justification for using contraception was found to be the

prevention of unintended pregnancies was also debunked by a study by (Gothwal et al., 2020). Moreover, a study contradicted the current finding that 21.1% of adolescents claimed to use contraception to avoid STIs (Cobbold, 2018).

5.3 Uptake of contraceptive

Majority of the respondents 269(68.1%) have never used any contraceptive method before. A study that revealed low levels of contraceptive use, with 74.7% of men and 82.1% of women reporting that they do not use any form of family planning, supports the current finding (Rondini & Krugu, 2009). A study by (Ofosu & Sam, 2020), which supported this current finding, found that the majority of adolescents (94%) also said they had never used any form of contraception in the past. Additionally, Yidana et al., (2015) found that 80% of adolescents said they had never used contraceptives before, which is consistent with the current finding. Fatima, (2021)'s study supports the current findings that the majority of students (79.6%) have never used modern contraceptives. However, Gothwal et al., (2020) found that about 29% of respondents had never used any form of contraception in their lifetime, contradicting the current finding. According to the current research, adolescents may not have been exposed to information about sexual and reproductive health in the classroom, in the media, or through community outreach initiatives.

A total of 134 (33.9%) respondents said they were currently using contraceptives to prevent pregnancy, and 109 of these said they made the decision with their partners. This result suggests that the optimal prevalence of contraception among adolescents was below average. This result affirms a study by Boamah et al., (2014), which discovered that only 22.9% of teenagers regularly used contraception. Additionally, Agyemang et al., (2019)'s study, which discovered that 95% of the survey participants had some knowledge of contraceptives but

that overall prevalence was only 18%, confirmed this. This high level of awareness did not lead to its use as a result. Again, a study by discovered that 16.5% of sexually active teenagers used modern contraceptives (Casey et al., 2020). However, this discovery was challenged by Yau et al., (2022) in their study, which discovered that 75.8% of school-age adolescents reported using a contraceptive during a recent sexual encounter. Adolescent may not use contraception as often as adults do because of barriers to both getting access to and using methods.

180 respondents, or 71.7%, stated that their fear of side effects prevents them from using contraceptives at the moment. This outcome is in affirmation with a research from an earlier study by Abrafi et al., (2021), who discovered that fear of the actual and supposed side effects of contraceptives is the reason why teenage girls do not utilize contraceptive methods. In their study, Yidana et al. (2015), who established that the idea of contraceptive side effects was identified as a constraint to adolescent use of contraceptives ($P=0.001$ and $X^2=61.6$), also supported these findings. This most recent discovery fits with a study by Beson et al., (2018) which discovered that a significant obstacle the fear of contraceptive side effects, caused by a lack of accurate information, that has been a barrier to the use of modern contraceptives in rural Ghana. In contrast to the current findings, Chandra-Mouli & Akwara, (2020) found that only 12.4% of respondents cited concern over negative side effects as their primary justification for their non-use of contraception. The current finding that side effects contributed to people not using contraceptives was contradicted by a lower finding by Alhassan, (2018) of 33%. This recent finding suggests that, despite high levels of knowledge and awareness, there are still diverse myths and misconceptions about adolescent using contraceptives.

Condoms were mentioned by half (50%) of those who said they were currently using contraception. This recent discovery might be related to the accessibility and affordability of male condoms. A study that found that all male respondents who used contraception 73.9% of users used male condoms supports the current finding (Mumuni & Ali, 2016). Yidana et al., (2015) also discovered that the condom was the most widely used method of contraception, with about 46.3% of survey respondents having used condoms. Furthermore, Kiragu & Zabin, (1995) supported the current finding that 55% of men and 43% of women reported using condoms. This current finding was however refuted by Keogh et al., (2021) that only 22% of adolescents used condoms which is lower. Condom use is a common form of protection used during sexual activity to prevent the spread of sexually transmitted infections (STIs) and unwanted pregnancy. Studies and surveys consistently report that condom use is widely accepted and practiced by individuals globally. According to a study conducted by the Guttmacher Institute, among sexually active individuals aged 15-44 years in the United States, 58% of men and 60% of women reported using a condom during their last sexual encounter. Another survey conducted in the United Kingdom found that 80% of sexually active individuals aged 16-44 years reported using a condom during their last sexual encounter. There are several reasons why condom use is so common. Firstly, condoms are widely available and accessible, with many health clinics, drug stores, and supermarkets offering free or low-cost condoms. Secondly, condoms are one of the most effective methods of preventing STIs, including HIV/AIDS, gonorrhea, and chlamydia. A study conducted by the National Institute of Allergy and Infectious Diseases found that consistent condom use can reduce the risk of HIV transmission by up to 92%. Finally, condoms are also an effective contraceptive method, with an effectiveness rate of 98% when used correctly. This means

that condoms are a reliable form of protection against unwanted pregnancy. In conclusion, condom use is common due to its widespread availability, effectiveness in preventing STIs and unwanted pregnancy, and its general acceptance as a form of protection during sexual activity. With ongoing education and awareness efforts, condom use is likely to continue to be a popular and effective form of protection for sexually active individuals.

Almost all the respondents 297(75.2%) revealed that they get their contraceptives from the chemical/pharmacy shops. Adolescent may not be afraid to walk into pharmacy shops to get what they need because pharmacies are easily accessible in their neighborhood. This discovery may be attributed to the fact that adolescents may find it challenging to visit health centers and express their desire to use contraceptives, as suggested and confirmed by a study by (Enuameh et al., 2014). Again, this end result is in affirmation with a study by Boamah et al., (2014), which discovered that adolescents (62.1%) most frequently obtained contraceptives from chemical sellers or pharmacies. (Fatima, 2021)'s study supported the current finding that the majority of students (88.7%) mentioned pharmacies as places to get emergency contraceptives. However, Kagashe & Honest, (2013) discovered that, contrary to the results of the present study, only 37.2% of teenagers obtain their contraceptives from the pharmacy. According to the most current data which revealed that health centers are the most common source of contraception for teenagers (89.6%), was once more conflicting by (Gothwal et al., 2020).

When asked how long they had been using contraceptives, 215 people (53.4%) said they had been doing so for less than a year. According to the findings of this study, empowerment programs, such as career guidance and counseling programs and adolescent health clubs in SHSs, can increase adolescents' convictions and boost their desire to use modern

contraceptives during every sexual encounter in a bid to avoid unplanned pregnancies and sexually transmitted diseases, must be prioritized. This study supports (Cobbold, 2018)'s finding that 63.83% of respondents had used a contraceptive in the previous year or less. Alhassan, (2018) challenged this finding because they discovered a lower percentage of adolescents (74, or 40%) who reported using family planning services in the previous year.

5.4 Predictors of Uptake of Contraceptives

A test of association between socio-demographic characteristics and their uptake of contraceptives revealed a statistically significant association between the school students attend and uptake of contraceptives ($X^2 = 44.435$, $p < 0.001$) as students from Adanwomase SHS (58.6%) had a higher proportion of high uptake of contraceptives compared to other schools.

The test of association also showed a statistically significant association between sex of student and uptake of contraceptives ($X^2 = 10.356$, $p = 0.001$) as male students had a higher proportion (53.3%) of higher uptake of contraceptives than female students.

Additionally, there was a statistically significant association between Forms of students and uptake of contraceptives ($X^2 = 9.103$, $p = 0.011$) as students in Form 2 had a higher proportion (46.8%) of high uptake of contraceptives as compared to the rest of the Forms (Form 1 and 3).

Furthermore, the result again indicated a statistically significant association between how often students are able to discuss issues concerning sex with their partner and uptake of contraceptives ($X^2 = 24.732$, $p < 0.001$). The result revealed that students who discussed issues concerning sex once a week had a higher proportion (58.8%) of high uptake of

contraceptive as compared to the other groups. This current finding affirms the finding reported by Boamah et al., (2014) which revealed that consistent use of contraceptives among adolescents was significantly linked to partner discussions about the use of contraception (P 0.01). This suggests that adolescents who talk about using contraceptives or sex issues with either their partners or parents before having their first sexual experience are more likely to use contraceptives than those who never do. The reason might be that through the discussion adolescents are enlightened about the dangers of not using contraceptives.

The test of association also showed a statistically significant association between relationship and uptake of contraceptives ($X^2 = 61.309$, $p < 0.001$) as students who are in a relationship had a higher proportion (65.8%) of high uptake of contraceptives compared to students who are not in relationship. This current finding is in affirmation with a Ugandan study which reported that higher odds of not using contraception were found among students who were not in a relationship at the time (odds ratio 1.8, 95% confidence interval 1.2-2.7) (Mehra, 2012). This implies that adolescents who are in relationships have high awareness of the various forms of contraceptives from their partners and are ready to use it to avoid pregnancy as against those who are not in relationships.

CHAPTER SIX

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

6.0 Introduction

The present chapter includes a summary, conclusions and recommendations for future research.

6.1 Summary

The study's goal was to determine the variables that affected whether or not teenagers in senior high schools in the Kwabre-East Municipality used contraceptives. The study collected its data using a quantitative strategy and an analytical cross-sectional design. 395 students from five senior high schools in Ghana's Kwabre East Municipality, in the Ashanti Region, between the ages of 15 and 19, participated in the study, which used a structured questionnaire, consisting of 275 (69.6%) females and 120 (30.4%) males. The use of contraceptives among adolescents was examined using binary logistic regression, chi-square analysis, and student t-tests among other statistical tools. The results showed that knowledge 272(68.86%) and attitude 342(86.58%) were high but prevalence of contraceptive use was low 126(33.9%) among the respondents. The school students attend ($X^2 = 44.435, p < 0.001$), sex/gender of student ($X^2 = 10.356, p = 0.001$), Form/level of students ($X^2 = 9.103, p = 0.011$), how often students are able to discuss issues concerning sex with their partner($X^2 = 24.732, p < 0.001$) and being in a relationship($X^2 = 61.309, p < 0.001$) were statistically significant factors predicting contraceptive use.

6.2 Conclusions

The study's findings revealed that knowledge of contraceptives was high (272(68.9%)), and a statistically significant link was discovered between student gender and knowledge of contraceptive usage ($X^2 = 3.908$, $p = 0.048$). 342 students (86.6%) had positive attitudes toward using contraceptives. It was discovered that students in relationships had more positive attitudes toward using contraceptives, as there was a statistically significant association with being in relationships and attitudes toward contraceptive use. ($X^2 = 3.765$, $p = 0.052$). Despite the fact that it is quite high (25% versus 33.9%) compared to the national prevalence rate, the contraceptive prevalence was found in the study to be low 126 (31.9%) among the respondents. In all, the study found a number of factors such as the school students attend, gender, level/form of student, who the student is able to discuss sex issues with and students who are in relationship was significantly associated with the use of contraceptives.

6.2 Recommendations

The findings of the study have compelled the following recommendations to assist in addressing contraceptive issues among adolescents:

- First and foremost, the Municipal Health and Education Directorates must work together to organize a Trainer of Trainers workshop at regular intervals for selected students (both males and females) from the municipality's various senior high schools who will return to their respective schools to train or educate their peers (peer educators) on contraceptive methods, use, side effects, and so on in order to provide a friendly and stigma-free environment for the uptake of contraceptives by adolescents.

- In addition, the study's results indicated that while contraceptive use was widely known, its prevalence remained low, at just 31.9%. Positive and proactive behavior modification programs should be implemented by both the Ghana health and education services in the Kwabre east municipality to help adolescents understand the risks of unprotected sexual behavior, including the possibility of contracting STIs like HIV and AIDS as well as Hepatitis B and C, and to empower them to take charge of their sexual lives responsibly. This will help prevent complications or even death from unsafe abortion of unintended pregnancies.
- The family being the primary socializational setting where values, norms, and beliefs are formed, the study's findings indicated that adolescents who discussed sex issues with parents had positive attitudes toward using contraception. As a result, a partnership between the Municipal Education Service and Parent-Teacher Association is essential to help parents develop their nurturing skills. Parents should frequently discuss sex and reproductive health issues with their children in order to help them develop the right values and norms regarding sexual activities. They can make the best decisions as a result of this. The frequency and style of parental communication are essential for adolescents' sexual and reproductive health.
- Finally, to avoid risky sexual practices that might result in unintended pregnancies and STI/HIV infections, other future initiatives by the Kwabre-East Municipal Health Directorate should place more of a focus on health education aimed at adolescents.

6.3 Strengths and limitations of the study

One of the strengths of the study is that, it included 15 to 19-year-old in-school adolescents of both sexes, offered some understanding and insight into the variables that predict adolescents' use of contraceptives, which may have an impact on interventions and policies relating to sexual and reproductive health.

However, because it was a cross-sectional study with some variables measured retrospectively, it had some limitations. As a result, the study could experience some recall bias. In addition, only five of the nine senior high schools in the Kwabre-East Municipality that were studied were public senior high schools, Consequently, it's possible that not all of the study's adolescent participants had the same views.

Some questions appeared to be sensitive, and respondents appeared to be hesitant to respond. This was addressed by assuring them of the confidentiality of their information.

Future research is encouraged in order to put knowledge into practice, particularly regarding adolescent contraceptive use. Since this study used a quantitative approach, additional research can be done using a mixed method approach to investigate the causes of the responses provided by adolescents in order to understand how this may affect their behavior regarding the use of contraceptives.

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APPENDEXES

INFORMED CONSENT FORM

PARTICIPANT INFORMATION LEAFLET AND CONSENT FORM

Research Title:

PREDICTORS OF CONTRACEPTIVE USE AMONG ADOLESCENTS IN SELECTED SENIOR HIGH SCHOOLS IN THE KWABRE EAST MUNICIPALITY

Introduction

My name is BOAKYE YIADOM AKWASI and I am from the Department of Social and Behavioral Change (SBC) of the School of Public Health (SoPH) at the University for Development Studies (UDS). I am conducting the above research and I am seeking for your child's participation in this research study because it has become more necessary to enquire more about Predictors of Contraceptive Use in terms of Knowledge, Attitudes, and prevalence among Adolescents in Senior High Schools in the municipality.

Purpose(s) of research

This study aims at exploring why some adolescents in the Kwabre-East Municipal of Ghana use contraceptives and why others do not use contraceptives, thus the various factors enabling or restricting it use or not. This research is conducted as partial fulfillment of the award of Master of Philosophy Degree in Community Health and Development. Your child has been selected for this research because his/her views will be relevant in answering the research questions which is to:

5. Assess the knowledge of contraceptives among adolescents.
6. Assess adolescents' attitudes towards contraceptive use.
7. Determine the prevalence of contraceptive use among adolescents and
8. Determine the predictors of consistent contraceptive use among adolescents in Senior

High Schools.

Procedure

A structured questionnaire will be administered to Senior High School students to find out their knowledge, attitudes, and other predictors towards the use of contraceptives in the Municipality. The structured questionnaire will contain about 41 questions and will be made up of four sections: Section A will deal with socio-demographic characteristics information; Section B will deal knowledge on contraception; Section C will deal with attitudes towards contraceptive use and Section D will also deal the uptake of contraceptive use among respondents. The questionnaire will be administered with the aid of 2 trained field assistants. Your child has been selected to be part and we would be grateful for his/her opinion on the subject. There are no right or wrong answers. Your child's assistance in responding to the questions will help us better understand the student's knowledge, attitudes, and other predictors towards contraceptive use. All the answers given by your child would be kept confidential and nothing he/she says would be traced back to him/her. The questionnaire administering will last about half an hour. Your child has the right to opt-out of the study at any point in time he/she does not feel comfortable. In all about 372 participants from the selected senior high schools are expected to take part in the study.

Risks and Benefits

There are no risks in participating in this study. If your child suffers any emotional pain by answering any of the questions, He/she will be referred to a psychologist for counseling. Your child will not benefit directly from this study, but the answers he/she provides will be used to inform policy for the improvement in Adolescent Sexual and Reproductive health

services.

Anonymity and Confidentiality

All personal data will be treated confidentially. Only I (the researcher), and my supervisor will have access to the data to ensure confidentiality, also at no point will your child's name be mentioned in this research or Publication. All information collected will be stored in locked cabinets and all data will be destroyed shortly after the completion of the research.

Voluntariness

Your child's participation in the research should be strictly out of free will. He/she is not under any obligation to do so.

Alternatives to participation

Choosing not to allow your child to participate in the research will not affect him/her in any way in their school.

Costs/Compensation

For your time and inconveniences created, we will compensate your child with a bottle of water to show our appreciation for his/her participation.

Contacts

To clarify any doubt concerning this study, please do not hesitate to contact Boakye Yiadom Akwasi on 0246879867 and Dr. Gifty Apuing on 0205803392

Further, if you have any concern about the conduct of this study, your welfare or your rights as a research participant, you may contact:

The Office of the Chairman

Committee on Human Research and Publication Ethics

Kumasi

Tel: 03220 63248 or 020 5453785

Dissemination of Results

The final report of the study would be disseminated to the Senior High Schools and other Institutions in the Kwabre-East Municipality that were involved in the study.

CONSENT FORM

Statement of person obtaining informed consent:

I have fully explained this research to _____ and have given sufficient information about the study, including that on procedures, risks and benefits, to enable the prospective participant make an informed decision to or not to participate.

DATE: _____ NAME: _____

Statement of person giving consent:

I have read the information on this study/research. I have also talked it over with the researcher to my satisfaction.

I understand that my participation is voluntary (not compulsory).

I know enough about the purpose, methods, risks and benefits of the research study to decide that I want to take part in it.

I understand that I may freely stop being part of this study at any time without having to explain myself.

I have received a copy of this information leaflet and consent form to keep for myself.

NAME: _____

DATE: _____ SIGNATURE/THUMB PRINT: _____

QUESTIONNAIRE

DATA COLLECTION TOOL

Questionnaire

Code: **Date:**

I am a Graduate student from the school of Public Health, UDS conducting research on the **Predictors of Contraceptive Use Among Adolescents in Senior High School in Kwabre East Municipality**. The questionnaire seeks to collect information on demographic characteristics, knowledge, Attitudes, and Predictors of contraceptive use. **All information provided will be treated with maximum confidentiality**. Thanks for your cooperation.

1. Which SHS do you attend? *

- Adanwomase SHS
- Simms SHS
- Adventist Girls SHS
- Kofi Adjei SHS
- Gyamaa Pensan SHS

SECTION A: SOCIO-DEMOGRAPHIC CHARACTERISTICS INFORMATION			
Circle the correct number corresponding to the right answer			
Serial No	Questions		Response
1	Respondent	Male Female	1 2

2	Age	15years 16years 17years 18years 19years	1 2 3 4 5
3	What form are you in?	Form 1 Form 2 Form 3	1 2 3
4	What is your religion?	Christian Muslim Traditionalist Other	1 2 3 4
5	Who do you stay with?	Mother Father Parents Guardian	1 2 3 4
6	How often are you able to discuss issues concerning sex with him/her?	Once a week Once a month Quarterly Yearly Never	1 2 3 4 5
7	Who are you able to discuss sex issues with?	Sibling Peers Teachers	1 2 3

		Parents	4
		Social media	5
8	Are you currently in a relationship?	Yes	1
		No	2
SECTION B: KNOWLEDGE ON CONTRACEPTION			
9	What is the main purpose for Contraceptive?	To plan and space pregnancies	1
		Use for preventing child birth	2
		Used for enjoying sex	3
10	Who is eligible to use contraceptive?	Adults	1
		Married couples	2
		Anyone who is sexually active	3
		None	4
11	I gained or have my knowledge of contraceptives through.....	Media	1
		Peers	2
		Teachers	3
		Parents	4
		Siblings	5
12	My information on contraceptive use comes from	School	1
		home	2
		media	3
		peers	4
		None	5
13	From whom do you learn or inquire about sexual relationships?	Peers	1
		Parents	2
		Teachers	3
		Siblings	4
			5

		Media	
14	Have you heard of family planning methods?	Yes No	1 2
15	If yes, which type of family planning method do you know? Chose all that apply.	Injectables Intra uterine device Natural family planning methods Implants Emergency contraception Female sterilization Male sterilization Condoms Oral contraceptive pill Others specify.....	1 2 3 4 5 6 7 8 9 10
16	I know my sexual reproductive rights	Strongly Agree Agree Never Disagree Strongly disagree	1 2 3 4 5
SECTION C: ATTITUDE TOWARDS CONTRACEPTIVE USE			
17	I can easily walk into a health facility and ask for contraception	Strongly Agree Agree Never Disagree Strongly disagree	1 2 3 4 5
18	Contraceptives benefit males too	Strongly agree Agree Neutral Disagree	1 2 3 4

		Strongly disagree	5
19	Contraceptive methods can protect the health of family and community.	Strongly agree Agree Neutral Disagree Strongly disagree	1 2 3 4 5
20	Religious beliefs can prevent people from using contraceptives.	Strongly agree Agree Neutral Disagree Strongly disagree	1 2 3 4 5
21	Cultural beliefs can prevent people from using contraceptives.	Strongly agree Agree Neutral Disagree Strongly disagree	1 2 3 4 5
22	Would you go in for before or after sex	Yes No Maybe	1 2 3
23	I don't use contraceptives because I am not worried about pregnancy or my partner getting pregnant	Strongly Agree Agree Never Disagree Strongly disagree	1 2 3 4 5
24	Contraceptives are very safe	Strongly disagree Disagree Neutral Agree Strongly agree	1 2 3 4 5
25	Females must remain a virgin till marriage.	Strongly Agree Agree Never Disagree Strongly disagree	1 2 3 4 5

26	I can discuss contraceptive issues with my partner	Strongly disagree Disagree Neutral Agree Strongly agree	1 2 3 4 5
27	Family planning promotes sexual promiscuity	Strongly disagree Disagree Neutral Agree Strongly agree	1 2 3 4 5
28	I use condoms to prevent sexually transmitted diseases.	Strongly Agree Agree Never Disagree Strongly disagree	1 2 3 4 5
SECTION D: UPTAKE OF CONTRACEPTIVE USE			
29	Have you ever used any contraceptive method before?	Yes No	1 2
30	Are you currently doing something or using any method to avoid getting pregnant?	Yes No,	1 2
31	If yes, did you decide with your partner?	Yes No	1 2
32	If no, why are you not using any method?	Desired for more children Fear of side effect Non-affordability Lack of information Lack of spousal consent	1 2 3 4 5

33	If yes, Which of the methods are you using?	Female sterilization Injections The pills Implants Condoms Emergency contraception Intra uterine device Diaphragm Spermicide None	1 2 3 4 5 6 7 8 9 10
34	How often do you use contraceptives?	Most often Occasionally When encounters with an emergency Not often	1 2 3 4
35	Where do you often get your contraceptives when you need them?	Hospitals Health centers or clinics Chemical shops or pharmacies Others specify.....	1 2 3 4
36	For how long have you been using this method?	Less than one year 1-2years 3-5years Others specify.....	1 2 3 4
37	What are the reasons for using the method?	No reason Minimal side effects Affordable Convenient Easy to use	1 2 3 4 5

38	Have you ever changed a contraceptive method before?	Yes No	1 2
39	If yes why did you changed the method?	Side effects Cost Ineffectiveness of method Perceived sickness	1 2 3 4
40	Will you advise a friend or relative to use contraceptive?	Yes No	1 2
41	My religious and cultural believes support contraceptive use	Strongly disagree Disagree Neutral Agree Strongly agree	1 2 3 4 5


ADMINISTRATIVE APPROVAL LETTER

GHANA EDUCATION SERVICE
KWABRE EAST MUNICIPAL EDUCATION OFFICE

P.O BOX 30
MAMPONTENG-GHANA
TELEFAX 03220-74577
DIRECTOR'S OFFICE 03220-70647
E-mail -

OUR REF NO: GES/ASH/KEM/V.
kwabreeast@yahoo.com

Your Ref:


REPUBLIC OF GHANA

DATE: 1ST MARCH, 2022

MR. BOAKYE YIADOM AKWASI
C/O UNIVERSITY FOR DEVELOPMENT STUDIES
P. O. BOX TL 1350
TAMALE

ATTENTION:
ALL HEADS OF SENIOR HIGH SCHOOLS
KWABRE EAST MUNICIPAL

PERMISSION TO CONDUCT RESEARCH

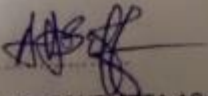
With reference to your letter dated 28th February, 2022 on the aforementioned subject, you are kindly permitted to carry out your research topic **"Predictors of Contraceptive Use among Adolescents in Senior High Schools in the Kwabre East Municipality"**.

The research will be conducted in all the Six (6) Senior High Schools in Kwabre East Municipality. The target group will be the Students in the Six (6) Senior High Schools in the Municipal.

I kindly entreat you to adhere to all the safety protocols of Covid-19 during your research.

The Directorate would be grateful if you could provide him with this information and any assistance he may need.

Thank you.


.....
MR. BAFFOUR ATTA ASARE

SUPERVISOR COVER LETTER

UNIVERSITY FOR DEVELOPMENT STUDIES
School of Allied Health Sciences
(Department of Public Health)

Tel: 0244467280
1883,
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Local : 5:7811/106.15
Internet: www.uds.edu.gh

09/03/22

The Chairman
Committee on Human Research, Publication and Ethics
Kumasi
Dear Sir,

Request for ethical approval

Please, I write to humbly introduce Mr. BOAKYE YIADOM AKWASI (UDS/CHD/0036/19), a Second-year MPhil community health and development Student in the Department of Social and Behavioural Change, School of Public Health of the University for Development Studies. Mr. Boakye is currently working on his thesis titled: **“PREDICTORS OF CONTRACEPTIVE USE AMONG ADOLESCENTS IN SELECTED SENIOR HIGH SCHOOLS IN THE KWABRE EAST MUNICIPALITY”**.

Please, find attached the proposal and other required documents for your perusal. Please, feel free to contact me for any additional information about the research.

Yours sincerely

A handwritten signature in blue ink on a light-colored background. The signature is cursive and appears to read 'Gifty Apiung'.

Dr. Gifty Apiung Aninanya

ETHICAL APPROVAL LETTER



Kwame Nkrumah
University of Science
and Technology, Kumasi

College of Health Sciences
SCHOOL OF MEDICINE AND DENTISTRY

COMMITTEE ON HUMAN RESEARCH, PUBLICATION AND ETHICS

Our Ref: CHRPE/AP/141/22

22nd April, 2022

Mr. Boakye Yiadom Akwasi
Department of Social and Behavioral Change
University for Development Studies
TAMALE

Dear Sir,

LETTER OF APPROVAL

Protocol Title: "Predictors of Contraceptive Use Among Adolescents in Six Selected Senior High Schools in the Kwabre East Municipality."

Proposed Site: Kwabre East Municipality (Adanwomase Senior High School, Simms Senior High School, Antoa Senior High School, Adventist Girls Senior High School, Kofi Adjei Senior High School and Gyamaa Pensan Senior High School).

Sponsor: Principal Investigator.

Your submission to the Committee on Human Research, Publications, and Ethics on the above-named protocol refer.

The Committee reviewed the following documents:

- A notification letter of 1st March, 2022 from the Kwabre East Municipal Education Office (study site) indicating approval for the conduct of the study at the Municipality.
- A Completed CHRPE Application Form.
- Participant Information Leaflet and Consent Form.
- Research Protocol.
- Questionnaire.

The Committee has considered the ethical merit of your submission and approved the protocol. The approval is for a fixed period of one year, beginning **22nd April, 2022** to **21st April, 2023** renewable thereafter. The Committee may, however, suspend or withdraw ethical approval at any time if your study is found to contravene the approved protocol.

Data gathered for the study should be used for the approved purposes only. Permission should be sought from the Committee if any amendment to the protocol or use, other than submitted, is made of your research data.

The Committee should be notified of the actual start date of the project and would expect a report on your study, annually or at the close of the project, whichever one comes first. It should also be informed of any publication arising from the study.

Thank you for your application.

Yours faithfully,

(Rev. Prof. John Appiah-Poku)
Honorary Secretary
FOR: CHAIRMAN

Room 7, Block L, School of Medicine and Dentistry, KNUST, University Post Office, Kumasi, Ghana
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