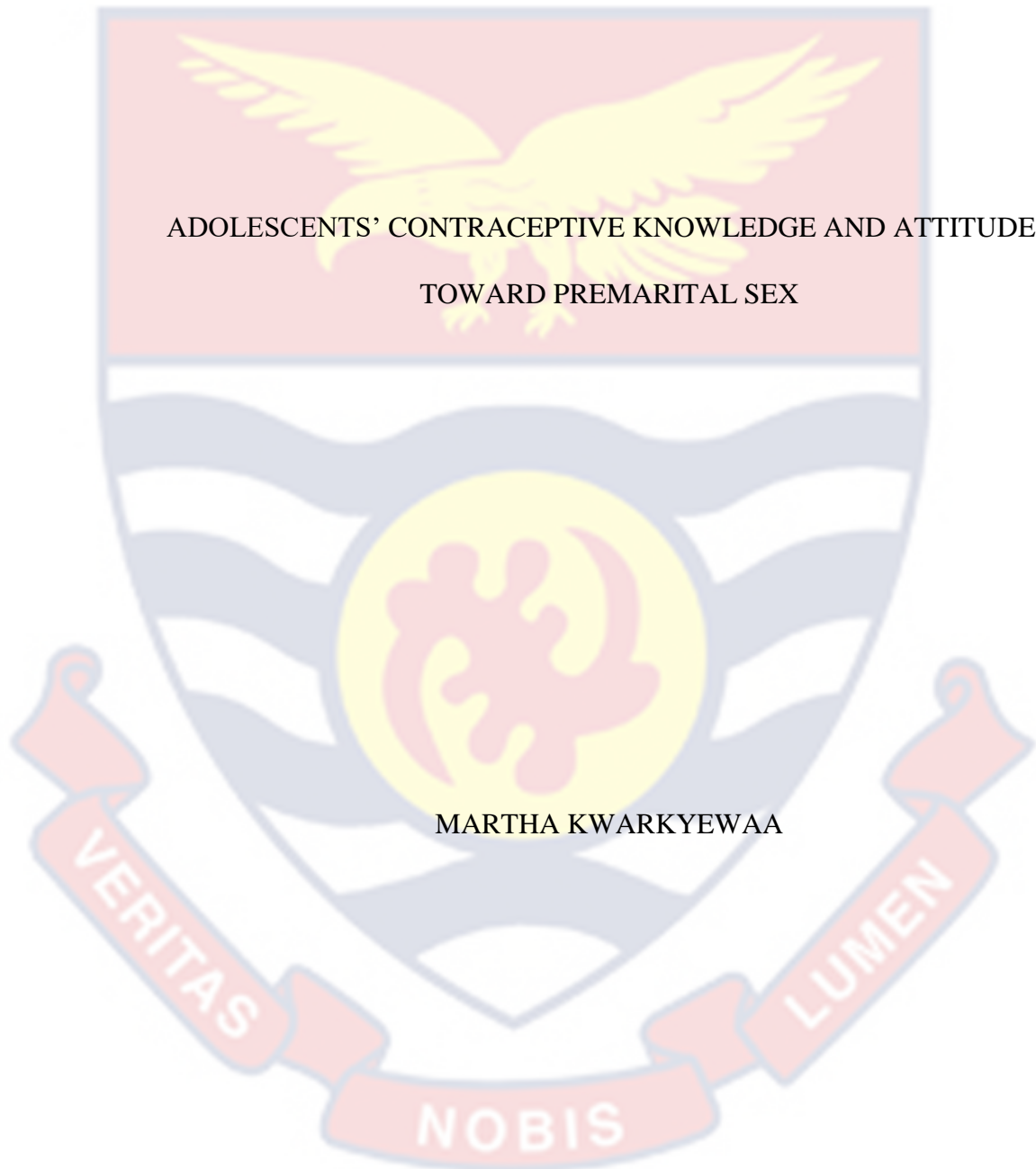


UNIVERSITY OF CAPE COAST



ADOLESCENTS' CONTRACEPTIVE KNOWLEDGE AND ATTITUDES
TOWARD PREMARITAL SEX

MARTHA KWARKYEWAA

2023

UNIVERSITY OF CAPE COAST

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TOWARDS PREMARITAL SEX

BY

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Thesis submitted to the Department of Education of the College of Distance
Education, University of Cape Coast, in partial fulfillment of the requirements
for the award of Master of Philosophy degree in Guidance and Counselling

NOVEMBER 2023

DECLARATION

Candidate's Declaration

I hereby declare that this thesis is the result of my own original research and that no part of it has been presented for another degree in this university or elsewhere.

Candidate's Signature: Date:

Name:

Supervisors' Declaration

We hereby declare that the preparation and presentation of the thesis were supervised in accordance with the guidelines on supervision of thesis laid down by the University of Cape Coast.

Principal Supervisor's Signature: Date:

Name:

Co-Supervisor's Signature: Date:

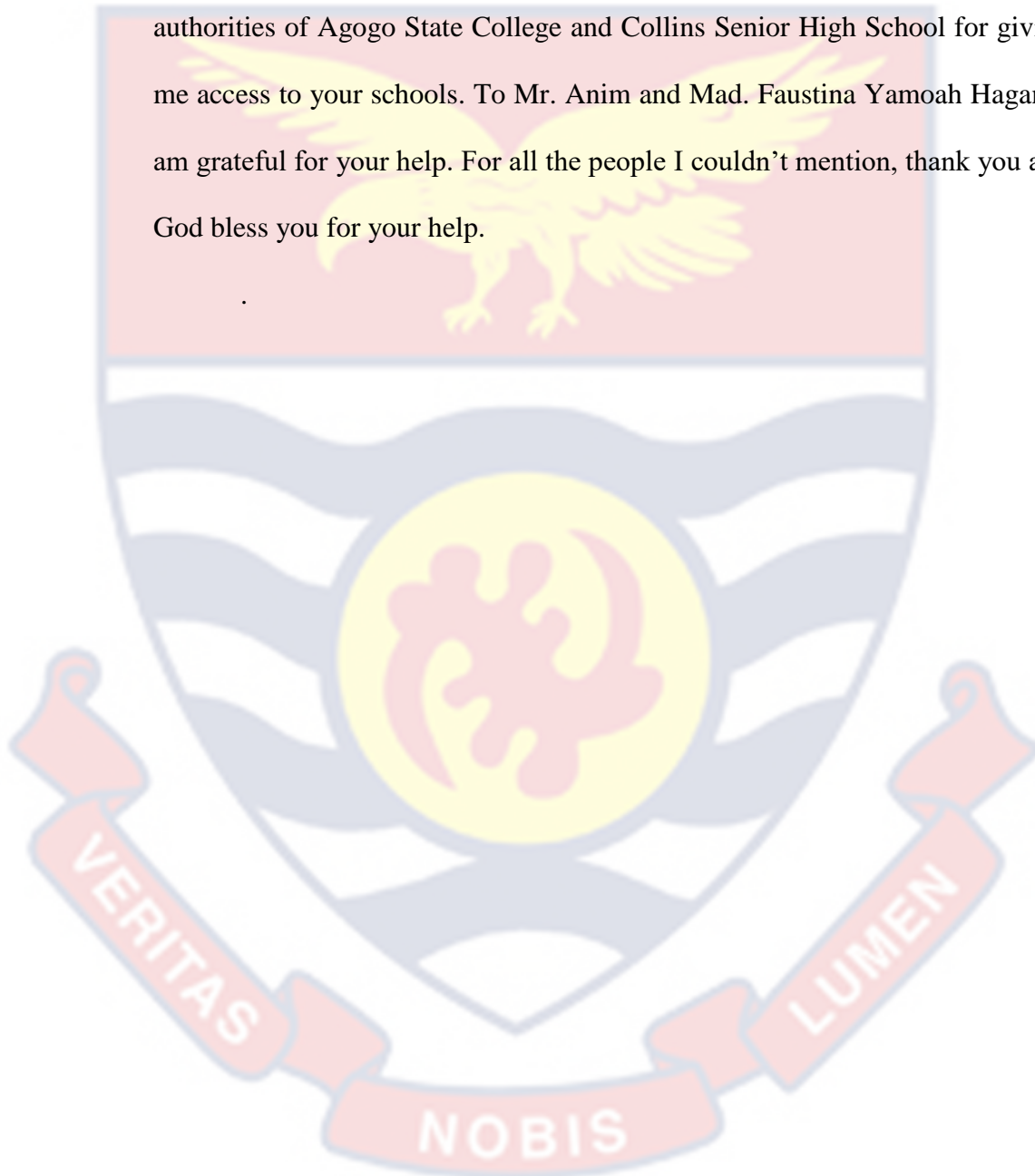
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ABSTRACT

This study sought to investigate the relationship between adolescents' contraceptive knowledge and their attitudes toward premarital sex among senior high school students in the Asante Akim North District of Ghana. The study employed the explanatory sequential mixed method. A sample of 361 final-year students were sampled from two senior high schools in the Asante Akim North District for the study. Questionnaire and interview guide were used in data collection. Descriptive and inferential statistics were used to analyze the quantitative data whereas thematic analysis was used to analyze the qualitative data. The study found that adolescents have a high level of knowledge in the three contraceptive types identified whereas attitudes towards premarital sex was generally negative. A statistically significant negative relationship was found between knowledge of modern contraceptives and attitudes towards premarital sex. There was no statistically significant relationship between natural contraceptives and attitudes towards premarital sex while a positive significant relationship was found to exist between knowledge of emergency contraceptives and attitudes towards premarital sex. Also, no significant difference was found in the attitudes of those with knowledge of modern, natural, and emergency contraceptives. The study recommends that counsellors and educators educate students on contraceptives with an emphasis on its usage and side effects to equip them with enough information to prevent unwanted pregnancies.

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DEDICATION

To myself and my family



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CHAPTER ONE

INTRODUCTION

Reports on adolescent premarital sexual activities have been on the rise with many teenage pregnancy reports across Ghana. In the light of this, the current study investigated adolescents' contraceptive knowledge and attitudes toward premarital sex at some selected senior high schools. This chapter looks at the background to the study, the statement of the problem, the research objectives, significance of the study, limitation and delimitations of the study.

Background to the Study

Premarital sexual activities among the youth seem to be on the rise nowadays. According to Chamie (2018), premarital sex has increased worldwide with a greater prevalence in advanced countries than in developing countries. Chamie reported that most young people at the onset of the 21st century had engaged in premarital sex as teenagers and the percentage was more than eighty in the United States, Finland, Germany, United Kingdom, Norway, Denmark and Iceland. The situation was not different from countries in Latin America, Asia and Africa where Chamie reported that survey data available pointed to increased premarital sexual activities. Icenhower (2015) also reported that surveys conducted in China in 1989 found that 15% of citizens reported to having had premarital sex, however, a recent survey found 71% of Chinese citizens admitting to having had sex before marriage. Teferra, Erena and Kebede (2015) reported that premarital sexual activities among adolescents have been on the rise in sub-Saharan Africa. Kyille, Tabong and Konlaan (2018) added that a fourth of all adolescents in sub-Saharan Africa have had sexual experience.

Premarital sex is explained as a willing and intentional sexual intercourse engaged in by people who are not married (Arega, Zewale & Bogale, 2019). Premarital sex in this study therefore refers to sexual intercourse engaged in by adolescents who are not married and are in senior high school (SHS). Adolescence is a period of transitional development from the onset of puberty to the attainment of adulthood (Steinberg, 2001). Steinberg explained that it is a critical developmental period characterized by a state of increased psychological and physical change. Physical development which culminates into sexual maturation makes the young person experience intense sexual desire. It is a period characterized by risk-taking behaviours, (Ceperich & Ingersoll, 2011) although they are aware of the risk (Sanders, 2013), and at the same time seek to gain acceptance among friends and are therefore easily influenced by friends.

They therefore feel invulnerable, and combined with the search for their own identity necessitates a need for experimentation that expose them to early sexual intercourse, with its associated unplanned pregnancies, abortions and sexually transmitted infections. Also, during this period, there is an increased opportunity by the adolescents to partake in behaviours that are harmful to their health including abuse of alcohol and other substances. In addition to pressure from peers to conform to peer group norms, adolescents develop behaviours and practices that are harmful to their current and future health situation (Call, Riedel, Hein, McLoyd, Petersen, & Kipke, 2002).

In the face of these characteristics of adolescence that expose adolescents to premarital sex, some environmental factors also expose adolescents to premarital sexual activities. Bocar and Biong (2016) indicated

that open mindedness of the present-day adolescent is a major contributor to their eagerness to engage in premarital sex. Also, United Nations Population Fund [UNFPA], United Nations Educational, Scientific and Cultural Organization [UNESCO] and World Health Organization [WHO] (2015) reported that premarital sexual activity among young people is associated with poor state of family relations, peer influence, alcohol and drug usage, and exposure to the internet. In addition, Govender, Naidoo and Taylor (2020) identified peer pressure, drugs and alcohol, sexual experimentation, myths about contraception, unprotected sex, the media, parental influence, poverty and transactional sex, vulnerability, and partner rejection as factors that provoke risky sexual behaviours among adolescents.

Owolabi, Onayade, Ogunlola, Ogunniyi and Kuti (as cited in Adekunle, 2014) indicated that adolescents' involvement in unprotected premarital sex is one of the issues that is dangerous to their life as young people, as this exposes them to various reproductive health problems. Young people's involvement in premarital sexual intercourse puts them at risk of unplanned pregnancies, induced abortions, early motherhood, maternal mortality and other maternal related morbidity, contraction of human immunodeficiency virus/acquired immunodeficiency syndrome (HIV/AIDS) and other sexually transmitted infections (STIs) (Adekunle, 2014; Bogale & Seme, 2014). Regret, distrust, emptiness and emotional distress are some of the other problems associated with young peoples' involvement in premarital sex (Rena, 2006).

World Health Organization [WHO], (2014) reported that of the estimated 333 million new Sexually Transmitted Infections that occur in the world every year, at least one third occur in young people under the age of 25,

and more than one out of twenty adolescents contracts a non-viral curable Sexually Transmitted Infections globally every year. In Ghana, Sexually Transmitted Infection rate was 34.4 percent for females and 13.6 percent for males who are 15-24 years old according to the 2014 Ghana Demographic and Health Survey (GDHS), making them the age group with the highest prevalence.

United Nations Children's Fund [UNICEF], (2022) reported that as at 2021, the global prevalence of HIV among adolescents was about 1.71 million accounting for 5 percent of all people living with HIV and about 11 per cent of new adult HIV infections with adolescent girls bearing the highest burden of three quarters of all new HIV infections among adolescents. Sub-Saharan Africa accounts for 86 percent of adolescents living with HIV globally, followed by Asia and Latin America. UNICEF further reported that about 1.55 million adolescents live with HIV in sub-Saharan Africa with South Africa recording the highest prevalence followed by Mozambique and then Nigeria. In Ghana, the Director General of Ghana AIDS Commission in a media engagement session reported that young people within the ages of 15-24 recorded 5211 new cases of HIV which accounts for 28 percent of all new cases recorded in 2020 with a higher prevalence among women (Ghana AIDS Commission, 2021).

WHO (2020) reported that death among 15- to 19-year-old girls globally is largely caused by pregnancy and childbirth complications with the highest rates occurring in low- and middle-income countries as they account for 99 percent of maternal deaths of women aged 15–49 years globally. Further, statistics has shown that girls aged 15 to 19 years who get pregnant annually in developing regions is estimated to be 21 million while an approximated 12 million of them give birth (Darroch, Woog, Bankole, & Ashford, 2016).

Darroch et al. added that one of the leading causes of maternal morbidity, maternal mortality and other lasting health problems is unsafe abortion which is estimated to be 3.9 million among girls aged 15–19 years annually.

The number of early pregnancies in Ghana, according to GDHS (2014) stood at 14 percent among adolescents at the period of data collection. Teenagers who had begun childbearing has risen very fast with respect to age, from 1 percent at age 15 to 31 percent at age 19. Pregnancy rate which was already high in the country surged sharply in the wake of Covid-19. Ghana Health Service (GHS) reports that about 13 teenage pregnancy cases were recorded every day in Ghana in 2020 during the peak period of covid-19 (Fetrie, 2021).

Given the increase in premarital sexual activities among young people, contraceptives use can help reduce the rates of unwanted pregnancies and complications from abortion (Oguntona, Adedeji & Odusanya, 2013). Sweya, Msuya, Mahenda, and Manongi (2016) explained that contraceptive use provides the youth with the opportunity to increase educational opportunities, productive livelihood, increase health and development and decrease health risks. Contraceptive is explained as a method that helps to avoid pregnancy by interrupting with the natural process of ovulation, fertilization and implantation. There are modern and traditional or natural methods of contraception. Modern methods are female sterilization, male sterilization, intrauterine device (IUD), implants, injectable, the pill, male condoms and female condoms, whilst the traditional methods are rhythms, withdrawal, and lactational amenorrhea method (LAM).

Although premarital sexual activities are common among young people, most of them do not use any form of contraception. Hindin and Fatusi (2009) reported that although the use of condom has increased, African youth who are sexually active are still not adequately protected, and in the face of increased contraceptive use among young African, it is been reported that there still exists a high rate of unmet contraception need among adolescents. A health survey in Ghana in 2020 revealed that only 18 percent of adolescents who were sexually active were using contraception (Josef, Michèle, Obeng-Amoako, Heiko, Marieke, & Behrendt 2021). Further, meeting the youths' need of contraception is needed to achieve the Ghana Family Planning 2020 goal of increasing the contraceptive prevalence rate of unmarried women from 31.7 percent in 2015 to 40 percent in 2020, and expanding contraceptive usage among unmarried adolescents who are sexually active by 2020 (GFPCID, 2015 as cited in Amporfu, Arthur, Novignon, & Brad, 2020).

It is explained that knowledge enables man to judge circumstances and voluntarily make decisions and the amount of knowledge adolescents have about contraceptives play a major role in deciding whether they will accept and use them or not. Studies conducted in Ghana have showed that there is general knowledge about contraceptive among young people but in-depth knowledge and usage is limited. Awusabo –Asare, Biddlecom, Kumi-Kyereme and Patterson (2006) reported a high level of modern contraceptive knowledge where 90 percent of both male and female adolescents indicated to having heard of at least one modern contraceptive method. The most mentioned method was the male and female condoms with limited information about other methods. Further it was found 79 percent of female and 67 percent of males and females

who have sexual experience knew that pregnancy could occur at certain times of the menstrual cycle, however, only 30 percent of females and 15 percent of males who said they were aware actually knew the exact period. Boamah, Asante, Mahama, Manu, Ayipah, Adeniji, and Owusu–Agyei (2014) in their study among adolescents on contraceptives usage found out that 88.9 percent of respondents had knowledge of at least one contraceptive with the knowledge of male condoms being the highest (84.0%).

Pope, Westerfield and Walker (1985) argued that the source from which individuals gain information on contraceptives affect the level of contraceptive knowledge and accuracy of the information acquired. It is believed that organized or structured sources does not only contribute to the level of knowledge of contraceptives but may provide accurate information on contraceptives as compared with the unorganized or unstructured sources like peers. However, sex education in Ghanaian schools is limited with little emphasis on contraceptives.

Agyei (2017) reported that adolescents are not able to use Sexual and Reproductive health (SRH) services, an avenue where they can get accurate information on contraceptives because of the fear of being gossiped about as being bad when they are seen using SRH services. These challenges limit adolescents' access to these services and therefore the amount of contraceptive information they are likely to receive from this source.

The current study therefore sought to investigate senior high school students in Ashanti Akim North District of the Ashanti region, knowledge level of contraceptives and its relationship with their attitudes towards premarital sex.

Implications for counselling was also discussed to enable school counsellors provide effective interventions to help solve the menace.

Statement of the Problem

Annang (2021) stipulated that data from the Ghana Education Service (GES) revealed that the Ashanti region in Ghana leads in teenage pregnancies in the country. This was disclosed by the Ashanti Regional Girl Child Coordinator of GES on an FM morning show. She stated that, there were 128 cases in the upper primaries, while Junior High Schools recorded 783. The report further stated that 310 cases were reported in the senior high schools with the total number of female teenage pregnancy cases standing at 1228 in the Ashanti Region.

The Ghana Statistical Service, (2014) reported that female teenagers in the Asante Akim North District (one of the districts in the region) recorded 482 births representing 0.7 percent of children born in the district. Also, it was reported that nine teenage mothers and eight pregnant adolescents sat for the 2019 Basic Education Certificate Examination (BECE) in the district (Oheng, 2019) and this could be evidence of adolescents' involvement in premarital sex and limited contraceptive usage amongst them.

These figures are alarming and if not addressed, it will have short and long-term outcomes on the individual and the economy. On the part of the individual, the underage mother is likely to terminate her schooling because of stigmatization, shame and ridicule associated with early pregnancy from the society as a whole and the school as well. The male is also likely to terminate school to look for a job to cater for the pregnant teenager. Research on adolescent sexual behaviour and school dropout in Ghana, Malawi, Uganda and

Burkina Faso revealed that girls who engaged in sexual activities before marriage in these countries were notably likely than those who have not engaged in such act to stop schooling at the secondary school level. It was also found that females were at a higher risk than their male counterparts to drop out of school when they become sexually active and engage in premarital sex (Guttmacher Institute, 2009). On the part of the economy, it has implications of human capital accumulation. This therefore calls for attention to be paid to matters relating to dealing with the increasing rate of premarital sexual activities in the country.

Akyem, Agyapong and Gans-Larty (2017) in a study to explore the attitudes and perceptions of teenage mothers on the use of contraceptives in the Agogo Community of Ashanti Akim North District revealed that teenage mothers in the study had more negative attitudes and perceptions about contraceptives. High influences of cultural norms and the lack of adequate knowledge about the use of contraceptives, according to Akyem et al have contributed to the low patronage of contraceptive use among teenage mothers in this community.

Awusabo-Asare et al. (2017) reported that although Ghana is implementing an advanced school-based adolescent reproductive health education programme compared to other African countries, its emphasis is on abstinence to the neglect of issues concerning contraceptives. This is as a result of the perception of Ghanaians that teaching topics that touch on sexuality and contraceptives will rather promote promiscuity among the children.

This high incidence of teenage pregnancy may be an evidence adolescents' involvement in premarital sex and limited contraceptive usage. The researcher, being a teacher who teaches adolescents and having had the experience of students who drop out of school as a result of teenage pregnancy, decided to conduct the study to find out SHS students' knowledge of contraceptives and whether this knowledge influences their attitudes towards premarital sex to help in the provision of the needed counselling.

Purpose of the Study

The purpose of the study was to investigate the relationship between SHS students' knowledge of contraceptives and their attitudes towards premarital sex in some selected senior high schools in Ashanti Akim North District of the Ashanti Region.

Research Objectives

Specifically, the study sought to:

1. Determine the relationship between adolescents' knowledge of modern contraceptives and their attitudes towards premarital sex.
2. Determine the relationship that exist between adolescents' knowledge of natural contraceptives and their attitudes towards premarital sex.
3. Establish the relationship between adolescents' knowledge of emergency contraceptives and their attitudes towards premarital sex.
4. Assess the differences in attitudes towards premarital sex of adolescents with knowledge of modern, natural and emergency contraceptives.

Research Hypotheses

The following hypotheses were formulated to guide the study based on the research objectives

H₀1: There is no statistically significant relationship between adolescents' knowledge of modern contraceptives and attitudes towards premarital sex.

H_a1: There is a statistically significant relationship between adolescents' knowledge of modern contraceptives and attitudes towards premarital sex.

H₀2: There is no statistically significant relationship between adolescents' knowledge of natural contraceptives and attitudes towards premarital sex.

H_a2: There is a statistically significant relationship between adolescents' knowledge of natural contraceptives and attitudes towards premarital sex.

H₀3: There is no statistically significant relationship between adolescents' knowledge of emergency contraceptives and attitudes towards premarital sex.

H_a3: There is a statistically significant relationship between adolescents' knowledge of emergency contraceptives and attitudes towards premarital sex.

H₀4: There is no statistically significant difference in the attitudes of adolescents with regard to knowledge of modern, natural and emergency contraceptives.

H_a4: There is a statistically significant difference in the attitudes of adolescents with regard to knowledge of modern, natural and emergency contraceptives.

Significance of the Study

The findings of the study will provide school counsellors with information concerning students' knowledge of contraceptives and their attitudes towards premarital sex. This information will help school counsellors in planning counselling programmes. For reproductive health care providers,

the findings of the study will provide data on how far information on contraceptive have gone with adolescents and help them to adopt the necessary strategies to meet the needs of these young ones.

For the District Management Committee, the findings of the study will provide information on the issues pertaining to adolescent's knowledge of contraceptives and attitudes towards premarital sex. This will help in planning and making decisions concerning the reproductive health needs of adolescents in the district. The study findings will add up to knowledge and also serve as literature for reference for further academic discourse on premarital sex and contraceptives. Also, participants of the study will get the opportunity to be educated on contraceptives. Lastly, for Non-Governmental Organizations that deal with adolescent and reproductive health issues, the study findings will provide them with information and measures to adopt in providing education on contraceptives.

Delimitations of the Study

The study focus was to ascertain the relationship between adolescents' knowledge of the three contraceptive types (modern, natural and emergency) and their attitudes (positive or negative) towards premarital sex. The study was conducted among senior high school students of Asante Akim North District because of the high incidence of teenage pregnancy among students here. Also, two out of the three senior high schools in the district participated in the study. Instruments for the collection of data were the interview guide and questionnaire.

Limitations of the Study

Respondents may not have been truthful in their responses because of the sensitive nature of issues on sexuality and this could affect the validity of the study. Also, respondents may have randomly selected answers which may not be a true reflection of their state, and that could affect the study.

Definition of Terms

Knowledge: it refers to familiarity or understanding of something or someone which is gained through education or experience.

Contraceptives: it refers to drugs or devices used to avoid pregnancy and STD's.

Contraceptive knowledge: refers to familiarity or understanding of devices or drugs used to prevent pregnancy, how it is used and side effects of these devices and drugs.

Adolescents: refers to young people in the process of developing from childhood to adulthood. For this study, the age limit of World Health Organization's definition of "young people" is adopted which is people within the ages of 10 and 24.

Attitude: refers to a set of emotions, beliefs, and behaviors toward a particular object, person, thing, or event. Attitudes are often the result of experience or upbringing, and they can have a powerful influence over behavior.

Premarital sex: is a sexual activity practiced by a boy and a girl who are not married.

Organisation of the Study

The study is organized into five chapters. Chapter one deals with the background of the study, statement of the problem, the purpose of the study,

research questions, research hypotheses, significance of the study, delimitation of the study, limitations of the study, and definition of terms.

Chapter two deals with the review of related literature. It highlights the theoretical framework, conceptual framework and empirical review of the study. The Psychoanalytic theory by Sigmund Freud underpins the study. Conceptual framework on contraceptive knowledge and attitudes towards premarital sex is also analyzed and empirical review on adolescents' level of contraceptive knowledge, attitudes towards premarital sex, the relationship between knowledge of modern contraceptives and attitudes towards premarital sex, relationship between natural contraceptives and attitudes towards premarital sex, relationship between emergency contraceptive and attitudes towards premarital sex and difference in attitudes between adolescents with knowledge in modern, natural and emergency contraceptives was done.

Chapter three also deals with the methodology consisting of research design; population, sample and sampling procedure, research instrument, instrument validity and reliability, data collection procedure, and data analysis. Chapter four highlights the presentation of study results/findings. The final chapter, which is chapter five, covers the summary of the study, conclusions based on the findings, and recommendations and counselling implications.

CHAPTER TWO

LITERATURE REVIEW

Introduction

This chapter reviews literature relevant to the study. It consists of a theoretical framework, a conceptual framework, conceptual and empirical review. The review is done under the following sub themes:

I. Theoretical framework

- a) Psychoanalytic Theory of Adolescence

II. Conceptual Framework

III. Conceptual Review

- a) Contraceptive knowledge

- b) Adolescents' sources of information on contraceptives

- c) Knowledge of contraceptive types

- d) Factors associated with contraceptive knowledge and barriers to accessing information on contraceptives

- e) Attitudes towards premarital sex among adolescents

IV. Empirical Review

- a) Knowledge of modern contraceptives and attitudes towards premarital sex

- b) Knowledge of natural contraceptives and attitudes towards premarital sex

- c) Knowledge of emergency contraceptives and attitudes towards premarital sex.

- d) Differences in attitudes towards premarital sex with regards to knowledge of modern, natural and emergency contraceptives

Theoretical Framework of the Study

Psychoanalytic Theory of Adolescence (Freud, 1905)

The psychoanalytic theory of adolescence, developed by Sigmund Freud in 1905 underpins the study. According to Freud, in the development of adult personality, children undergo series of psychosexual stages where the pleasure energies from the body focus on a particular erogenous area. Freud identified five psychosexual stages and the erogenous zone that serves as a source of pleasure associated with each stage. He indicated childhood experience as a major contributor to personality development. The psychosexual stages identified by Freud are: oral, anal, phallic, latent and genital stages and these stages span from birth to puberty (McLeod, 2019).

According to Freud (1905 as cited in Steinberg, 2001) the period of adolescence which begins at the genital stage of the psychosexual stages is seen as an innate time of disturbance as a result of changes associated with puberty. From his viewpoint, during the genital stage, the hormonal changes associated with puberty causes an increase in sexual drive that is, instinctual impulses, which tears the ego between the tough impulses of the id and the limitations of the superego tremendously stressing the adolescent. The adolescent goes through a phase of crisis and outdated psychosexual conflicts. According to Freud, restoring a psychic balance and resolving conflicts is a challenge for adolescents. He added that, the ability to work through these conflicts move individuals into a matured level of handling sexual relationships (as cited in Steinberg, 2001).

Anna Freud (1958, as cited in Steinberg, 2001) further postulated that the psychic imbalance makes the adolescent turn to peers as objects of emotional affection and sexual drive by breaking emotional ties from parents. Adolescents tend to oppose their parents and this has been described as normal as this is needed in order for the adolescents to develop into mature adults, a process known as detachment (as cited in Steinberg, 2001).

Sarnoff (1960), writing about social attitudes and psychoanalytic theory, saw attitude as a way to react unfavourably or favourably to varieties of objects. This disposition may be inferred from a diversity of visible responses made by the individual when confronted by a member of the class of objects toward which he has an attitude: movement, postures, sounds of voice, facial expressions, and verbalizations. It is further explained that attitudes are formed and maintained to serve as ego defense mechanisms that protect the individual against internal and external threats.

According to Freud (1894 as cited in Sarnoff, 1960), in his psychoanalytic theory, in the development of the individual, the child learns how to satisfy his desires in a socially accepted way and this, he called the ego. The quest to satisfy desires in socially acceptable ways may cause some internal tensions for the child and to manage these tensions, the child develop ways of managing these tensions which Freud called the ego defense mechanisms. Several ego defense mechanisms were identified by Freud but according to Sarnoff (1960), denial and identification with the aggressor have external manifestations which affect individuals' attitudes. Whereas some attitudes are formed to incorporate threat, some others are formed to deny existing dangers.

An empirical study conducted by Sarnoff (1960) to test the hypothesis that attitudes are formed as an ego defense mechanism of incorporating threat or identifying with the aggressor. The study tried to predict differences in the personality of people who accepted a practice imposed on them and those who rejected the practice. The results showed that those who highly accepted the practice tended to be very passive regarding hostility and were less prone to retaliate against aggressors. This goes to support Freud's theory that attitudes are formed to incorporate threat and identify with the aggressor.

From the psychoanalytic point of view, when it comes to attitudes towards premarital sex, the adolescent is torn between the desire for sex which is associated with puberty and the social norms which teaches abstinence. The adolescent may associate with the aggressor; that is society's position of abstinence and parental views and hold negative attitudes towards premarital sex. Moreover, with the adolescent breaking emotional ties with parents and associating more with friends, they may tend to form their attitudes which may deviate from that of their parents to please their peers. With an increase in sexual drive and attraction to the opposite sex, coupled with the desire to gain acceptance among their peers, adolescents are likely to shift from parental values of abstinence to forming positive attitudes towards premarital sex and therefore more likely for the adolescent to engage in premarital sexual intercourse.

The psychoanalytic theory can be applied to this study because it explains the attitudes of the youth towards premarital sex based on instinctual impulses and activities of the mind. Based on this theory, young peoples' attitudes towards premarital sex is as a result of mental processes emanating

from the interaction between the desire for sex which is associated with puberty and social norms. Positive attitudes towards premarital sex are developed when instinctual impulses to engage in premarital sex are able to overcome social norms of abstinence whereas negative attitudes are developed when social norms of abstinence overcome instinctual impulses.

Conceptual Framework

The conceptual framework of the relationship between knowledge of contraceptives and attitudes towards premarital sex is shown in figure 1.

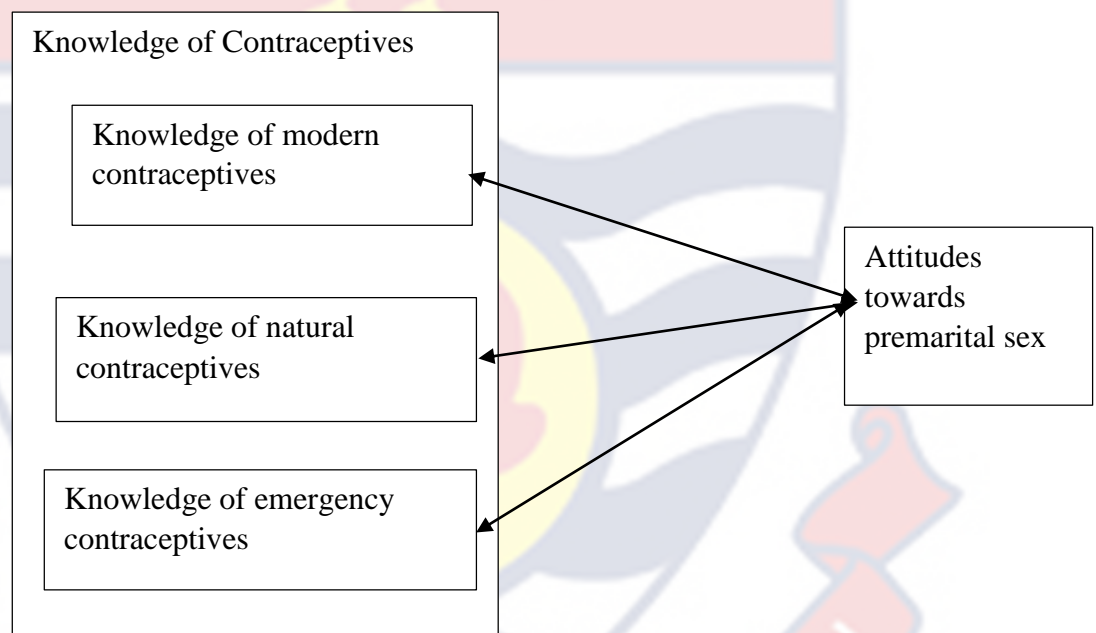


Figure 1: Conceptual framework for contraceptive knowledge and attitudes towards premarital sex. (Researcher Construct, 2022)

Based on literature, the study assumed that a high level of contraceptive knowledge which is as a result of a good sex education will result in negative attitudes towards premarital sexual behaviour. It is expected that a good sex education exposes the effects of premarital sexual behaviour as well as the limitations of contraceptive usage which is likely to elicit negative attitude towards premarital sexual behaviour. However, it is expected that a low level of

knowledge of the contraceptive types is likely to elicit positive attitudes towards engaging in premarital sexual activities. This is because a low level of knowledge of contraceptives which results from inadequate sex education makes adolescents to have limited or wrong information about premarital sex and contraception. A wrong or limited information makes young people engage in premarital sexual activities without a full knowledge of its consequences.

Conceptual Review

Contraceptive Knowledge

Gaining timely information on contraceptives has become necessary among young people because although they seek to delay parenthood, they are sexually active (Olubanke & Onasote, 2016). Contraceptive knowledge as defined by Nsubuga, Sekandi, Sampeera and Makumbi, (2016) is the state of awareness of contraceptive methods, any specific types and the source of contraceptives. Knowledge enables man to judge circumstances and voluntarily make decisions, so the amount of information adolescents have about contraceptives play a major role in deciding whether they will accept and use them or not. It has been postulated that contraceptive usage is highly influenced by knowledge of contraceptive types and their uses (Amaranta, Dehlendorf, Borrero, Harper & Rocca, 2014; Boamah et al., 2014; Munakampe, Zulu & Michelo, 2018). Khan and Mishra (2008) added that knowing about the contraceptive methods is the first step toward accepting to use the method. Brown and Eisenberg (1995) explain that limited contraceptive usage can be partly traced to inadequate knowledge about contraceptive methods and other reproductive issues in addition to the absence of skills needed to use contraception effectively.

Contraceptive is defined by Jain and Muralidhar (2011) as the intentional prevention of conception through the use of various devices, sexual practices, chemicals, drugs, or surgical procedures. Thus, any device or action which seeks to prevent pregnancy can be considered as a contraceptive. It involves methods and devices that distort the process of ovulation, fertilization and implantation; and also have diverse forms that prevent the achievement of pregnancy (Khanam, 2016). An effective contraception allows couples to enjoy their relationship without the worry of having an unplanned pregnancy as well as affording them the chance to have the number of children they want.

Contraceptives can be classified as modern and traditional, and there are several types of contraceptives. For modern contraceptives, there are the barrier methods that prevent sperms from reaching the ovum, like condoms; hormonal ones which prevent the woman from ovulating, examples are injections and pills; and intrauterine devices. Also, there are emergency methods that are used after sexual intercourse to prevent pregnancy and surgical sterilization methods which are permanent. In addition to the modern methods, there are traditional or natural methods of preventing pregnancy. These include the rhythm method, Lactational Amenorrhea Method (LAM) and the withdrawal method.

Adolescents' sources of information on contraceptives

Adolescents are said to be lively consumers of information, and individual distrust can bring about dismissing or rejecting the provided information (Jones, Bidllecom, Herbert, & Milne, 2011). This makes adolescent's source of information on contraceptives very crucial in deciding to accept or ignore information provided. Studies have shown that adolescents acquire information on contraceptives from several sources including schools,

parents, friends, media, the internet and health professional (Jones et al, 2011; Olubanke, and Onasote, 2016; Tchokossa & Adeyemi, 2018) with school, mass media and peer being a major source of information on contraceptives. It is further explained that information from organized sources like school, health centers etc. happen to be more accurate and therefore making them trusted sources of information.

However, Brown and Eisenberg, (1995) asserted that sexuality education and information about contraception which are given in schools are mostly inadequate as much emphasis is placed on abstinence limiting information on contraceptives. Jones, Biddlecom, Hebert and Milne (2011) in their study, “a qualitative study on teens level or sources on contraceptive information in the USA high school” found out that while some students have received detailed information about contraceptives in their schools, some also have received superficial information limited to condoms. However, most of these students trusted the information they received from their school because teachers are noted for factual knowledge.

Also, the participants reported that they had received information on contraceptives from family members and this was considered as a highly trusted source because of the inherent concern for teens’ wellbeing and experiential content of the information. However, the case is different in Africa where sexual intercourse is preserved for married couples due to social, religious and cultural reasons, therefore issues consisting of contraceptives and sex may not be discussed with young adults at home therefore limiting the information adolescent gain from the home (Boamah et al, 2014; Tchokossa & Adeyemi, 2018).

The study also identified friends as another source of information on contraceptives and this ranged from the sharing of experiences to talks on where to obtain hormonal methods and condoms but teens did not consider friends as a trustworthy source of information as information could be incorrect or exaggerated. Few respondents identified the internet as a source of information as the credibility of information was questionable. Many of the respondents identified the traditional media as a source of information as most respondents have been exposed to advertisements on contraceptives from radio and television and lastly few identified the doctors and their partners. Although doctors were considered a trusted source, adolescents refuse to go to hospitals for this service due to the embarrassment (Boamah, et al, 2014).

Reporting on the accuracy of contraceptive information, Pope, Westerfield and Walker (1985) conducted a study among freshmen of Midwestern College to examine the link(s) between contraceptive information source and accuracy of information and contraceptive behaviour of college freshmen with 340 college students as a sample. It was reported that the general contraceptive knowledge accuracy was poor; knowledge accuracy for all contraceptive types identified for the study was less than 70 percent irrespective of the sources from which the information was acquired although those from organized sources had higher scores than those from unorganized sources. This indicates that structured sources like schools, health institutions and churches are noted to provide more accurate information on contraceptives.

Knowledge of Contraceptive Types

On level of contraceptive knowledge, Khan and Mishra, (2008) reviewed Demographic and Health Surveys (DHS) and AIDS Indicator Surveys (AIS) of 38 developing countries between 2001 and 2005. Finding revealed a universal knowledge on modern methods of contraceptives. However, a significant fraction of youth in the Sub-Saharan Africa demonstrated no knowledge of modern methods whereas 72 percent of males and 49 percent of females in Chad demonstrated a high level of modern methods. Mali, Madagascar, and Nigeria showed low knowledge levels on modern contraceptive methods.

Furthermore, Munakampe, Zulu and Michelo (2018) in their study on abortion and contraceptive knowledge used literature searches from 6 databases; from 1970 to 2016. Thematic analysis was used in the data analysis and it was reported that even though sexuality education was provided in schools, adolescents had less or inaccurate knowledge about contraceptives and sexual health. They reported of being informed about the importance of condom use but had limited information on how to use it. This limited information prevents adolescents from adopting good practices with regard to reproductive health and safer pregnancy prevention approaches.

Nonetheless, the inculcation of sexuality education in the school system has changed the situation. Dangat and Njau, (2013) carried out a study on adolescents' attitude, knowledge and practice of family planning services in Tanzania. A sample of 316 respondents selected randomly from 10 SHS with a median age of 17 was used for the study. It was reported that participants (67.4%) had adequate knowledge level on contraception, while (32.6%) had low

knowledge level. The study further revealed that the most significant determinants for insufficient knowledge level on contraception were being in a lower class and attending a co-education school.

This was confirmed by Tchokossa and Adeyemi (2018) in a survey study of SHS female students in Osun in Nigeria, in which (61.5%) of the respondents had sufficient contraceptive knowledge. Inculcation of sex and health education into the secondary school curriculum was the key determinant of learners' contraceptive knowledge. Ahmed, Sule, Abolaji, Mohammed and Nguku (2017), using a cross-sectional survey assessed the general knowledge on contraceptives, degree of application of contraceptive devices, and sexual behaviours, among 300 single learners of the Bayero University Kano with a median age of 16-25 years. The main tools used for the study were the interview guide and structured questionnaire. Data was analyzed using Epi-info7 and Microsoft Excel 2016. Learners knowledge level on contraceptives was high (87.7%) with the commonest source being media and internet, that is, (89.3%) and (91%) respectively.

Although knowledge of contraception is adequate, some types were more known to adolescents than others. A study by Sharma, McCabe, Jani, Gonzalez, Demissie and Lee (2021) to assess young adults and adolescents' knowledge and attitudes on contraceptives, it was found that majority of the respondents had heard of contraceptive methods. It was found that knowledge of male condoms was 100 percent among respondents, knowledge of female condoms was 89.9 percent, knowledge of pills was 92.2 percent, injectables was 76.2 percent, hormonal vaginal rings was 72.1 percent, knowledge of Intrauterine Devices (IUD) was 66.7 percent, 64.8 percent knew of hormonal

contraceptive patches and knowledge of hormonal implants was 63.3 percent. Knowledge of Intrauterine Device was high among females (84.9%) than their male counterparts (15.1%).

Chimah, Lawoyin, Ilika and Nnebue, (2016) conducted a study to examine the level of contraceptive knowledge and their usage among SHS learners in Ojo, Lagos with a sample of 400 students using a cross-sectional survey. About (81%) of respondents indicated their awareness of condoms whilst (35.5%) indicated their awareness of oral pills. In Ghana, Awusabo–Asare, Biddlecom, Kumi-Kyereme and Patterson (2006) reported that knowledge of modern contraception was high, evidenced by the statistics that 90 percent of adolescents had knowledge of at least one modern contraceptive method with the most mentioned method being the male and female condoms, followed by the pills and then the injectables; and knowledge level was highest among older adolescents. Knowledge of traditional methods was however low with about one-third of respondents reported knowing any traditional contraceptive methods whereas one out of five adolescents knew of emergency contraception. The high level of awareness of condom was explained as partly due to nationwide promotional campaigns.

Similarly, Hagan and Buston (2012) in their study among adolescent students in Cape Coast, Ghana found out that the majority of respondents knew of at least one contraceptive method which is condom. Knowledge of injections was 3.3 percent, “traditional methods” was 23.3 percent and withdrawal methods were 4.3 percent. Respondents however had little knowledge on other methods such as sterilization, and intrauterine device (IUD). Boamah, et al. (2014) concurred that (89%) of the adolescents knew about one method of

contraception; that is, male condom, followed by pill, injection and emergency contraceptives; and respondents who had higher education; SHS and beyond were far advanced in knowledge as compared to those with no formal education.

Knowledge of contraceptives was not limited to modern regular contraceptives but also there exist knowledge of emergency contraceptives as well. Tamire and Enqueselassie (2007) examined emergency contraceptives knowledge among females with a sample of 774 female students using a cross-sectional survey. Study findings revealed that about half of the students have knowledge of emergency contraceptives. On specific types of emergency contraceptives, (83%) of the respondents mentioned pills and (34%) indicated IUCDs.

Concerning natural contraceptive methods, Audu, Yahya and Bassi (2006) carried out a study to understand how much correct information there is about natural contraception, and its practice. Awareness on natural FPM level was significantly less as compared to modern methods of contraceptives. The rhythm rate method was (50.7%), lactational amenorrhea method was (42.1%) and coitus interruptus was (36.1%). Generally, awareness of natural FPM was low in the study population.

In addition to knowledge of contraceptive types, adolescents also know of the benefits of contraceptives. Agyemang, Newton, Nkrumah, Tsoka-Gwegweni and Cumber, (2019) using a cross-sectional study looked at factors influencing contraceptive usage among adolescents in the Atwima-Kwanwoma District, Ghana using a sample of 200 sexually active female adolescents. Study findings revealed that (95%) of the respondents understood contraceptives and associated benefits. It was found that 39 percent of the respondents were aware

that prevention of unintended pregnancy is a benefit of contraceptive whilst 15 percent indicated that being able to plan the number of children one wants to have is a benefit of contraceptive.

Factors associated with contraceptive knowledge and barriers to accessing information on contraceptives

Hall, Castano, Stone and Westhoff (2010) conducted a systematic review of primary research from 1965 to 2009 and identified several demographic and reproductive health characteristics that were associated with contraceptive knowledge. It was found that being young and in lower college level, and being a non-contraceptive user accounted for low contraceptive knowledge. Also, having received counselling and education on contraceptives, prior usage of contraception and placing greater importance on pregnancy prevention are associated with high contraceptive knowledge. Agyei and Migadde (1995) explained that higher education is positively related to high contraceptive knowledge and this they attributed to the infusion of family life education in school curriculum. It was also found that engaging in sexual activity and discussing about contraceptive with friends or parents accounted for high contraceptive knowledge.

Averyire (2015) in this study, level of knowledge in reproductive health practices among senior high school girls in Greater Accra Region: A case study of two senior high schools, using a mixed method, to gather information from students in Kinbu Senior High School and Apostle Christo Asafo Senior High School revealed that adolescents' class or form influenced their level of contraceptive knowledge as there existed a significant difference between form one and two students in their level of contraceptive knowledge. Also, the

findings revealed that religion has a significant effect on contraceptive knowledge level. The findings also revealed that, adolescent level of knowledge was lowest among non-religious participants than Catholics, protestant, Pentecostals/charismatics and others. However, the type of school students attends (private or public) did not have any influence on level of contraceptive knowledge.

The study further revealed that adolescents encounter challenges in seeking for information on contraception. The behaviour of partners prevents girls from seeking for information on contraceptives. This they explained is a result of the fact that their partners do not support contraceptive usage which makes it unnecessary for them to seek for information on contraception (Averiyire, 2015).

Another barrier identified by Averiyire (2015) was unreliable source from which adolescents gain information on contraceptive. It was found that although there are many sources from which information on contraceptive is acquired, most of them depended on their peers for information because they are the ones they trust and these peers are also ignorant as themselves. This wrong information given by peers make adolescents loose interest in seeking for information on contraception. Another challenge that was identified by Averiyire was the fear of being stigmatized and shyness, as it is assumed that seeking for information on contraception implies that adolescents are sexually active and this is not acceptable in the Ghanaian society. Thus, most adolescents shy away from the seeking contraception information from the right sources.

According to Averiye (2015) another challenge student raised is the absence of reproductive health issues in the main Senior High School curricula although it is infused into other extracurricular activities. This limit the amount of information students' gains concerning contraception. Limited education on sexual matters from parents is also a challenge that was exposed in the study. Additionally, religious beliefs and cultural practices were identified as some of the barriers to seeking for information on contraceptives. This is because some religions see contraception as against the will of God and its usage as sin and because of that young people with such beliefs shy away from seeking information from contraception. Lastly, some adolescents refuse to seek for information on contraception because they think that if they acquire information, they will use them and they fear that they may get addicted to contraceptive usage (Averiye, 2015).

Although several studies have been carried out on adolescent contraceptive knowledge, the researcher in the current study sought to find out adolescents' contraceptives knowledge and its relationship with their attitudes towards premarital sex.

Attitudes towards Premarital Sex among Adolescents

Attitude is defined as a learned propensity to assess things in a particular manner (Kendra, 2020). It comprises evaluations of people, events, objects and issues. Evaluations can be uncertain, positive, or negative at times (Kendra, 2020). It's a person's inclined state of mind concerning a value. Attitudes can either be implicit or explicit. Kendra explains that explicit attitudes are those that one is conscious of and influences views, that guide behaviour and decision

while implicit attitudes are unconscious views that also influence behaviour and decisions.

Attitudes have been described to have three dimensions which are referred to as the ABC's of attitudes and these are the affective, behavioural and cognitive components (McLeod, 2018). The affective component consists of emotions or feelings connected to an attitude object or how an attitude object makes one feel (Kendra). The cognitive deals with the knowledge, thoughts, attributes and beliefs that one associates with an attitude object. Mostly, the positive and negative attribute associated with attitude object determines a person's attitude (McLeod, 2018). The behavioural aspect of attitudes refers to how a person's attitude towards a particular attitude object causes him or her to behave towards those objects.

Attitudes are often the result of experience and though they endure, it can also change. Kendra (2020) argues that attitudes can have a powerful influence over behaviour and McLeod, (2018) asserts that consistency is the basic assumption about the association between behaviour and attitude. That is, it is usually expected that a person's behaviour is consistent with their attitude but sometimes people behave in quite illogical ways; and behaviour is not always consistent with attitude. According to McLeod, strong attitudes influence behaviour the more and the strength of an attitude is dependent on the importance of the attitude to the individual and the knowledge one has about the attitude object. Since attitudes influence behaviour, understanding adolescent's attitudes towards premarital sex will help in understanding their premarital sexual behaviour.

Premarital sex is explained as a sexual activity between unmarried people. Before the 1950s, premarital sex was considered as sexual relations between two people before getting married to each other. Understanding of premarital sex has since shifted to person's engagement in sexual activity prior to marriage. This position pays less attention to the type of relationship that exist between the individuals. According to Chamie (2018), laws, religious beliefs and traditional values of some countries persistently preach abstinence until marriage while modern societies across all countries and regions have concluded on a surge in prevalence and acceptability of premarital sexual activities.

Historically, premarital sex was considered as an abomination in many societies and as sinful with respect to religion but since the 1960's, modern societies across all countries and regions have concluded in a surge of prevalence and acceptability of premarital sex with an attached stigma decreasing (Chamie, 2018). Chamie, in a global survey involving 40 countries revealed that fewer people measured sex between unmarried people to be unacceptable in moral terms. About (10%) of participant in Germany, France and Spain pointed sex among unmarried persons as an unacceptable act, and one third of respondents in Russia, Japan and US indicated same. However, most countries indicated that sex before marriage was not morally acceptable. This included Indonesia (97%), Pakistan (94%), Egypt (90%), Nigeria (77%), Philippines (71%), India (67%) and China (58%).

Premarital sexual activities and behaviour among the youth seem to be on the rise today than some few decades ago. According to Chamie (2018) premarital sex has increased worldwide with a prevalence higher in advanced

countries than in developing countries. Chamie reported that more than two thirds of young people at the start of the twenty first century had engaged in premarital sexual intercourse. Chamie further reported an increased prevalence of premarital sex in current surveys. Icenhower (2015) also reported that, in 1989 surveys in China found (15%) of citizens reported having premarital sex, however, a recent survey found (71%) of Chinese citizens admitting to having sex before marriage. Teferra, Erena and Kebede (2015) reported that SSA has documented increasing premarital sexual activities among adolescents. Kyille, Tabong and Konlaan (2018) added that a fourth of all adolescents in sub Saharan Africa have had sexual experience.

According to Massachusetts Department of Education (as cited in Babatunde, 2019), religious inclinations, socio-economic background, family values, cultural background, peer influence, media and self-image are factors that can cause adolescents to indulge in sexual activities before marriage. It is further added that adult family members' support and that of teachers will be needed by adolescents in dealing with the pressure from the society, media and peers, so they can post pone premarital sexual activities as these supports help adolescents to make decisions that are less-risky. Esna-Ashari, (2005) conducted a study in Iran among never married young people between the ages 18 and 29. The study sought to determine some factors affecting attitudes towards premarital sex with emphasis on the impact of age, sex, education, social class and exposure to the world. It was found that age and attitude towards premarital sex did not have any relationship but it was found that a significant relationship exist between sex and attitudes towards premarital sex as girls had more negative attitudes towards premarital sex than their male counterparts.

Also, level of education was not significantly related to attitude toward premarital sex however, a significant relationship was found between social class and attitude towards premarital sex as young people from families with poor economic background had more negative attitude toward premarital sex.

A significant relationship was found between exposure to the world and attitudes towards premarital sex, participants who had access to the internet and those who watched foreign TVs had more positive attitudes toward premarital sex.

Adekunle (2014) conducted a study to explore adolescent's attitudes towards premarital sex in relation to the impact of gender, age and religious affiliation of adolescents in Ibadan, South west Nigeria. The respondents consisted of students from both private and public schools aged between 12-20 years. It was found that no difference exists between the attitudes of adolescent boys and girls toward sexual activities before marriage, indicating that gender does not influence attitude towards premarital sex however, premarital sexual attitudes were influenced by respondents age and religious association. That is, adolescents' age and religious affiliation determined their attitudes towards premarital sex.

Further, Zheng et al, (as cited in Jie, Xiaohui & Yukai, 2011) asserted that the effect of rapid modernization, economic expansion, mass media, and exposure to new ideas has led to a change in the sexual attitudes and norms of adolescents in developing countries, China inclusive. Data from rural and urban areas indicate that sexual intercourse outside marriage is no longer an abomination, that is, there is a surge in prevalence and acceptability of premarital sex among young adults. In the study by Wang, Li, Stanton, Kamali,

Naar-King, Shah and Thomas (2007) in the Shanghai district, data from the baseline survey of 1304 school drop outs, aged 15 and 24, showed that (60%) of the youth held favourable attitudes towards premarital sexual intercourse and posited that young adults could have premarital sex suppose they were to be in love or if they wanted to. About (8%) of the respondents disapproved sexual activities between unmarried people, attitudes of one-third of the youth were neutral towards sex before marriage while the attitudes of males towards premarital pregnancy and sex were liberal as compared to their female counterparts.

Furthermore, Adhikari and Adhikari (2017) in their study higher secondary students in Pokhara Sub-Metropolitan's disposition with respect to premarital sex a descriptive cross-sectional study was adopted. Using a simple random sampling technique, 522 students between the ages 14 to 19 were selected from various high schools in the Pokhara Sub-Metropolitan as the sample for the study, out of which 362 responded to the premarital sex-related statement. Out of the respondents, some (80%) endorsed premarital sex whilst the remaining (20%) were against it. Considerably, the attitudes of the respondents towards premarital sex differed based on their academic level and exposure to pornography as those who had the latter had four times greater chance of having a positive disposition towards premarital sex. Their disposition was also affected by their gender and the types of talk they had regarding sexual issues. With regards to favorable attitude towards sex and chat on sexuality with peer group, females were more positive as compared to males.

Premarital sexuality is asserted to have become more common among young Africans, studies show that adolescents are disregarding traditional values which decry premarital sex in their societies (Eze, 2014; Rossier, Sawadogo, Soubiega & The ECAF team, 2013) as premarital sex is being normalized and considered as harmless and acceptable. The study by Muanda, Gahungu, Wood and Bertrand (2018), compared and contrasted perceptions and attitudes of the youths in both urban and rural contexts of DR Congo on contraceptive usage, marriage, pre-marital sex and prevention of pregnancy. Data were analyzed to identify themes in fourteen focus group discussions with 224 participants to assess young people's dispositions towards sexual and reproductive health. It was reported that most participants; both males and females had favourable attitudes towards premarital sex and several reasons were given for this disposition. Some of the reasons given were that: premarital sex is a piece of evidence that a woman is captivating to men and abstinence from premarital sex might result in bareness in marriage.

Further, it was identified that young men favoured premarital sex because of curiosity, a form of showing gratitude, for experience and as a test of manhood whereas lack of parental supervision and financial benefits are reasons why girls favour premarital sex. The little number of participants who had their premarital sexual attitudes being negative, held them on the basis of health risks, the stigma around premarital sex and religious reasons.

Eze (2014) carried out research on the attitudes adolescents have concerning premarital sex in Awka North and South Anambra State. The main objective for carrying out the study was to find the youth's attitudes and the factors accountable for these attitudes. The population of the study included all

the adolescent and married teachers and a sample of 430 students in SHS 2 selected from 3 boys, 4 girls and 3 mixed schools. The questionnaire was the instrument for data collection and data collected was analyzed from which it was observed that more than 20 diverse permissive dispositions regarding premarital sex were held by respondents. Males and females had different dispositions regarding premarital sex; out of 21 statements regarding premarital sex, males accepted 20 whereas their female counterparts accepted 19 of them and not less than 10 factors are responsible for these attitudes including showing their maturity, ego, and practicing what they learn from their friends.

Nhan, Phu, Tra, Phuong, Nhu, and Thu (2019) conducted a study aimed at exploring factors associated with attitudes, behaviours and knowledge of premarital sex among bedsit-living students living in bedsits in Hue city, Vietnam. A total of 730 students were used for the study, out of which 65.9 percent of the participants refused premarital sex whilst 34.1 percent accepted premarital sex in different situations. Some of the situations upon which premarital sex was accepted included whether it was consensual (21.4 %) and whether there was an understanding of contraceptives (6.7 %). It was also discovered that attitudes towards premarital sex were determined by gender, consciousness of the effects of sex before marriage, age, awareness of how to prevent knowledge of STDs and marital status.

This is not different from Nepal where according to Bhatta, Koirala & Jha (2013), issues about premarital sexual activities is considered an abomination but there is an increase in sex before marriage among the youth. Knowing general attitude towards pregnancy and premarital sex was the main objective. Purposive sampling was used to select learners from three SHS. A

sample of 324 students responded to structured questionnaires and descriptive and inferential analyses were done at 95 percent confidence level. It was reported from the study that 32.4 percent of respondents revealed premarital sexual activity to be appropriate. The majority of respondents gave responses regarding the appropriateness of sex before marriage, that is, to keep close relation, to take sexual experience and to satisfy sexual desire, that is, (29.5%), (31.4%), and (48.8%) respectively. A significant difference was found between adolescents' views with respect to the appropriateness of premarital sex.

Siramaneerat, Agushyana, Nugraha, & Mungkhamanee, (2017) examined the knowledge, attitudes and behaviours toward sex before marriage among adolescents in Indonesia using a secondary data from (RPJMN 2015) and with a sample size of 42,338 adolescents between the ages 15-24 years. In examining the effect of education, working and schooling status, gender, region and age of participants on reproductive health and attitudes toward sex before marriage, about (9.5%) of respondents reported to having engaged in premarital sexual activity. It was also found that education, working and schooling status, gender, region and age of participants influenced contraceptive knowledge and attitudes regarding PMS intercourse. Study findings suggest the provision of formal education on modern, natural and emergency contraception in various universities.

This does not differ from what Adaji et al. (2010) found in their research which adopted a cross-sectional method to assess school going adolescents' attitudes in relation to sex before marriage, contraception, abortion and unplanned pregnancies in Kenya. Information collected with a questionnaire showed that adolescents had conservative attitudes toward premarital sex

although females opined that males had uncontrollable sexual appetites. Similarly, Ilene, Stephanie & Kodjopatapa, (2001) revealed that Lome women had a more conservative attitude with respect to adolescent sexuality and contraceptive usage than men. Results further revealed that (48%) and (58%) of adult men and women disapproves of premarital sexual activities among young adults.

The above findings indicate variations in premarital sexual attitudes among young people, and given that attitudes towards premarital sex are socio-cultural issues, different cultural settings may have different attitudes. The researcher, therefore, sought to find adolescents' attitudes to premarital sex in the Ghanaian context.

Knowledge of Modern Contraceptives and Attitudes towards Premarital Sex

Talegani, Khoie, Noroozi, Tavakoli and Gholami (2017) added that knowledge and usage of modern contraceptives cannot be ignored in talking about the sexual attitudes of adolescents. Modern contraceptive, according to Hubacher and Trussell (2015) is a product or medical procedure that interrupts with reproduction from acts of sexual intercourse. There are several methods of modern contraceptives with different mechanisms of operation and different levels of effectiveness. Based on their mode of operation, modern contraceptives are classified into different groups. These are: long acting reversible contraceptives which are inserted into the woman's body for a long time to prevent pregnancy examples are intrauterine devices and implants.

There are the hormonal modern contraceptives which prevents ovulation and also fertilization by thickening the mucous of the cervix, examples are the pills and injectable. The barrier methods work by blocking the sperm from reaching the eggs to cause ovulation which includes the condoms, diaphragms, cervical caps, contraceptive sponge, and spermicides which ensure the efficient functioning of these methods and lastly, the permanent methods which are surgically irreversible methods of preventing pregnancy namely the vasectomy and tubal ligation (Hubacher & Trussell, 2015; Husney, Romito & Uranga, 2021; WHO, 2020).

Sharma, McCabe, Jani, Gonzalez, Demissie and Lee (2021) conducted a study among young people within the ages of 13 and 23 years, who visited Staten Island University Hospital's adolescent clinic from March to August, 2018. The study purposed to examine the attitudes and knowledge adolescents have about contraceptives with emphasis on intra-uterine device. Majority of the respondents had knowledge of contraceptive methods as knowledge of condoms was 100 percent. Knowledge of other modern methods like injectables, pills, vaginal ring, and intra- uterine device were also high indicating a high knowledge of contraceptives. In the face of high contraceptive knowledge, sexual activity was high among participants. It was reported that 80 percent of participants were engaging in sexual activities with majority them being in sexual relationships with the opposite sex. Also, 90.7 percent of the respondents who were aware of IUD, were involved in sexual activities indicating a high contraceptive knowledge and liberal attitudes concerning sexual activities before marriage.

This is not supported by the study by Wong (2012) who adopted a cross-sectional study method and gathered data with a self-administered questionnaire from a public university in Malaysia. No link was found between higher contraception and reproduction knowledge and permissive attitude towards premarital sex. A significant inverse link between premarital sexual attitude scores and knowledge scores was found. This shows that liberal attitudes towards premarital sex do not come as a result of just learning about pregnancy or reproduction. It was also found that the group with significantly low scores in contraceptive awareness and knowledge had an increasingly higher permissive attitude towards sex. That is, those with low contraceptive knowledge had positive attitudes towards premarital sex.

This is confirmed in a study by Jose et al. (2019) in their study among teenage girls. It was found out that most of the respondents have negative attitudes towards premarital sex. A weak positive correlation was found to exist between knowledge on contraceptives and attitude towards premarital sex. This indicates that as knowledge on contraception increased the negative attitude towards premarital sex also increased. Jose et al. explain that these negative attitudes could be attributed to strong religious beliefs and very good knowledge regarding contraceptives.

In a national survey of young people in the USA, Frost, Lindberg and Finer (2012) found that the odds of looking forward to having unprotected sex in 3 months' time decreased by 9 percent each time a respondent responded correctly to a question on the contraceptive knowledge scale. That is, as knowledge of contraception increase, the likelihood of engaging in premarital

sex decreases. This study, therefore, sought to fill the contextual gap in the various studies.

Further, Zhou, Wang, Ye, Gu, Zeng and Wang (2012) conducted a study among students in a college in Beijing to examine the determinants of their attitudes and knowledge about sexual matters, sexual behaviours, unplanned pregnancies and rate of abortion. A cross-sectional survey method was adopted and multistage cluster sampling method was used to recruit respondents. Data was gathered with a questionnaire from 2003 respondents and it was found that respondents sexual behaviour were influenced by their gender, grade, specialty, family situation. The study further discovered that majority of college students had limited information about issues concerning reproductive health. It was realized that respondents have permissive attitudes towards premarital sex as (58.7%) had positive attitude relating to premarital sexual intercourse although attitudes towards contraception was negative (29.7%). Although college students had positive attitudes towards premarital sex, their knowledge of contraception was low. This current study is similar to that of Zhou et al because both gathered information on young peoples' contraceptive knowledge and their attitudes towards premarital sex however the current study sought to find adolescents' knowledge of the various contraceptive types and the relationship between knowledge and attitudes towards premarital sex.

Using a cross-sectional study and a sample size of 557 young adults, Khajehei, Ziyadlou and Ghanizadeh (2013) purposed to investigate attitudes and knowledge of premarital sex using a self-designed questionnaire containing 33 items. Contraceptive knowledge was generally low for both men and women. Scores on adolescent attitude, and behavior towards premarital sexual activities

was generally low. That is, in as much as knowledge of contraception is low, attitudes towards premarital is also negative.

Sweya, Msuya, Mahande and Manongi (2016) performed a study in Tanzania in four universities using a cross-sectional study method among female students at the undergraduate level. Data was collected with a questionnaire and analyzed by descriptive statistics. It was realized that majority; 93.8 percent of the participants knew of the various contraceptives types with knowledge of pills and condom being the highest. It was also found that 64.2 percent of the respondents were involved in sexual activities with a higher number of them having had first sexual intercourse around the ages of 20 and 24 years, an indication of high contraceptive knowledge and positive attitudes towards premarital sex. Although knowledge of contraceptives is high, attitudes towards premarital sex is positive which manifest in their involvement in premarital sexual activities. This study used mixed methods approach to conduct the study, that is in addition to questionnaire which was also used by Sweya et al in their study, this study also used focused group discussion to gather information. So in addition to quantitative data, this study also gathered qualitative data to explain the quantitative data.

In another study to find out the attitudes toward premarital sex and adolescent pregnancy and its influence on contraceptive knowledge and use, data collected by the Population Observatory in Social Epidemiology (POSE) in Bandjoun (West Cameroon) in 2002 was used. A representative sample of 2,207 10 to 29 years old never married people were considered for analyses. On the whole, 40 percent of young people held negative dispositions concerning sexual intercourse before marriage, with females' attitudes being more negative

as compared to that of males. It was also found that respondents with favourable dispositions concerning premarital sex were more knowledgeable about contraceptives than others. Inversely, those with negative dispositions concerning sexual intercourse before marriage and adolescent pregnancy were less knowledgeable than others about contraception (Impact of attitudes toward premarital sex, 2008). The current study sought to fill contextual and methodological gap in this study.

Yeboah and Appiah (2015) carried out a study among senior high school (SHS) students (girls) to assess their sexual behavior in the light of their awareness of modern contraception and sexually transmitted infections. 180 girls were sampled from three SHS in the Akuapem North Municipality in Ghana and data was analyzed with Chi square test to establish associations between STIs, awareness of modern contraception, and sexual behaviour. Knowledge of modern contraceptives was measured by respondents' ability to state at least one reason for modern contraceptive and it was found that 96.1 percent of girls knew of modern conception and only 3.9 percent did not have knowledge of modern contraception. Concerning knowledge on STI, 94.4 percent of respondents had a fairly good knowledge as they were able to state one way of preventing STI where as 80 percent of respondents reported having engaged in sexual activities. From the study, it was realized that there was a high knowledge of contraception and STI but there is high rate of premarital sexual activities and therefore positive attitudes towards premarital sex. Although the study by Yeboah and Appiah is similar to this current study because both took place in the same context, the respondents for this current study is made up of boys and girls whereas Yeboah and Appiah used only girls.

Also, Yeboah and Appiah's focused on knowledge of modern contraception whereas this current study considered other contraceptive types.

Gbagbo (2020) randomly sampled 427 basic school pupil from basic schools in the Efutu Municipality to find out about their level of contraceptive usage. It was found out that 67 percent of participants in the study were in relationship whiles 60 percent had engaged in sexual activities. In the light of this high involvement in premarital sex, modern contraceptive knowledge was high (65%) although usage rate was low (21%). Although this study focused on basic school pupils, the current study sought to study students in senior high school with much emphasis on relationship between knowledge of modern contraception and attitudes towards premarital sex.

Knowledge of Natural Contraceptives and Attitudes Towards Premarital Sex

Natural contraception has been in existence since prehistoric times and it is practiced everywhere in the world (Kabongo, Baboo and Mweemba (2010). According to Unseld, Rotzer, Weigl, Masel and Manhart (2017), natural contraception consists of practices used to prevent or achieve conception without the use of any appliance or medicine. It is a method whereby a couple abstain and practice varieties of sexual contacts to schedule the spacing of their birth and the timing to have children (Kabongo, et al). It enables couples to plan their families through a natural process by adjusting their intimate periods in accordance with the woman's menstrual cycle without violating any religious and cultural standards they have about contraception (Unseld, et al.) Natural contraception requires a scientific knowledge of the male and female reproductive system in order to understand the changes associated with safe and

unsafe periods of the woman's menstrual cycle and avoiding intimacy during the unsafe periods to prevent conception.

Kabonga et al, (2010) explains that natural contraception methods are largely used today by couples and this is because natural contraception does not require any medical appliance or medicine, it does not have any cost, it is not against any religious belief and can be practiced without the knowledge of any external person. Different methods of natural contraception are available today and many of them have been proven medically potent in the prevention of conception although its success is dependent on couples' ability to exercise self-control and comply with the woman's cycle. (Unsel, et al., 2017)

Jain and Muralidhar (2011) identified some natural contraception methods which include coitus interruptus, lactational amenorrhea and rhythm method. Coitus interruptus, also known as withdrawal method is said to be the oldest known method of preventing pregnancy and it entails the removal of the penis, just before ejaculation from the woman's vagina to prevent semen from being released into the vagina. The effectiveness of this method is questionable as it is highly prone to failure because semen released before ejaculation and those released onto external sex organs can enter into the vagina to cause conception. Further, its success requires a high level of physical and emotional control on the part of the man. Lactational amenorrhea is where breast-feeding mothers release pregnancy prevention hormones for the first six months after delivery. This method is successful if the woman has not menstruated after birth and is breastfeeding day and night. In situations where baby does not breastfeed in the night or mother is unable to breast feed, this method is not reliable.

The third method is the rhythm method which requires predicting the fertile period, by keeping records of body temperature, or menstrual pattern, or changes in cervical mucus, or a combination of these (symptom-thermal method) and avoiding sexual intimacy during unsafe period of the month. This method is widely known, however, few people are able to identify the unsafe days in the cycle therefore limiting its effectiveness. It also has the weakness of not being useful for women who have irregular periods, those experiencing menopause and those who have just given birth (Jain & Muralidhar, 2011).

Kabonga et al., (2010) conducted a study among women in their reproductive years in Chilonga in Zambia to assess the factors that determine their utilization of natural family. A sample 425 women who attended antenatal and under five clinics were selected to respond to questionnaire. Also, 20 teachers trained in natural family planning methods were purposively sampled for focus group discussion. Data was analyzed with SPSS version 17 and it was found that most of the respondents (74%) were aware of natural contraceptives while (26%) were not aware of natural contraceptives. It was also realized that factors that influence the usage of natural contraception includes: marital status, number of children respondents have, knowledge of natural contraception methods, sources from which respondents acquire information on natural contraception, whether the husband is in support and family planning method accepted by one's religion. The rate of usage was higher among married respondents than single ones and was higher among respondents with more children than those with no children.

Further, respondents with knowledge of natural contraception used it more than those without knowledge. However, utilization of natural contraception is not influenced by respondents age, education level and religion. Although Kabonga et al., found out about knowledge of natural contraception in their study, which is also the focus of this current study, they concentrated much on factors that influence utilization whereas this current study sought to find relationship between knowledge and attitudes towards premarital sex. Also, respondents for the current study were students in senior high school whiles that of Kabonga et al., were women visiting ante-natal and under five clinics.

In a multi-country survey study conducted by Unselde et al. (2017), the results produced important insights into the benefits coupled had derived from using natural contraception. The study sought to explore the perceptions users have of natural contraception and its impact on their relationships. A total of 2560 respondents responded to online questionnaire and the findings showed that majority of men (55%) and women (95%) indicated that resorting to natural contraception has enabled them to gain a better understanding of their bodies. Three-quarters of women and about two thirds of men explained that using natural contraception has made their relationship better because it has helped them to talk about their sex life and improved their sexual life on a whole although fewer than 10 percent felt it had not. Also, about 80 percent of respondents with children indicated that the knowledge they have gained through the usage of natural contraception has enabled them to give their children proper sex education. The scope and context of Unselde et al.'s study is different from that of this current study.

Audu, Yahya and Bassi, (2006) sought in their study to find out about how much correct information women of childbearing age have about natural methods of family planning. Data was gathered by the use of questionnaires and it was found that information about natural contraception methods was significantly lower than knowledge for modern methods of contraception, utilization was low and methods were wrongly used. The level of knowledge for rhythm method was 50.7 percent, lactational amenorrhea method 42.1 percent and coitus interruptus was 36.1 percent. It was also found that respondents' sociodemographic factors influenced their utilization of natural family planning methods studied. Those who lived in rural areas were more inclined to the usage of lactational amenorrhea method than those who dwell in urban areas whereas Muslims with more children practiced coitus interruptus or the rhythm method more than their Christian counterparts. Audu et al.'s study used quantitative method in their study but this current study used both qualitative and quantitative methods.

Knowledge of Emergency Contraceptives and Attitudes towards

Premarital Sex.

Seetharaman, Yen and Ammerman, (2016) explained that emergency contraceptive plays an important role in avoiding unplanned conception when used the right way. Emergency contraception is contraception that is used after being intimate sexually to prevent conception; it is inexpensive, safe and effective in preventing about 80 to 85 percent of pregnancies that otherwise would have occurred (Babatunde, Ibirongbe, Omede, Babatunde, Durowade, Salaudeen & Akande, 2016). After unprotected sexual encounter, sexual abuse and contraceptive failure since no contraceptive provides 100 percent

protection, a second opportunity is provided to couples, by the use of emergency contraception to prevent unwanted pregnancies. It is also useful for young people who engage in sexual intercourse occasionally and for people who are unable to use regular contraception. Pregnancy related complications, as well as abortions among adolescents are avoided when emergency contraceptives are correctly used.

Seetharaman et al. (2016) assert that modern emergency contraception has its roots from the 1920s, when it was found that high doses of ovarian estrogen extracts could disrupt the process of conception in mammals. Since its inception, emergency contraception has undergone several transformations to its current state where we have hormonal and non-hormonal emergency contraception. The only non-hormonal emergency contraception is the copper intrauterine device which is placed into the uterus up to 5 days after ovulation or within 5 days of unprotected sex or contraceptive failure. The copper ions in the IUD prevents fertilization by limiting the activities of the sperms. It also makes the uterus non receptive for pregnancy to occur and it can be left in the uterus to serve as long-acting reversible contraception for 10 to 12 years. The hormonal ones are made up of different types of hormonal pills which are taken as single dose for some and double dose in some to prevent pregnancy within 5 days of contraceptive failure or after unprotected sex.

For adolescents to benefit fully from these contraceptives, equipping them with information about the various types available and how they can be acquired is a necessity. Seetharaman et al. (2016) reported that knowledge of emergency contraception varies greatly among countries in the world with highest levels reported in the US and European countries.

In a study in Switzerland, Ottesen, Narring, Renteria and Michaud (2002) sought to explain knowledge of emergency contraceptive and its usage among teenagers in high schools and professional centres who engage in sexual activities. Data was collected with anonymous computerized questionnaires from a sample of 4283 national representation of adolescents out of which (51.5%) were sexually active. Results showed that (89.3%) of sexually active girls and (75.2%) of boys had knowledge of emergency contraception. Knowledge of emergency contraception was associated with level of education of the father and respondents' academic level. It was also found that girls who had a confidant being a Swiss boy and those who have had the opportunity to have a discussion about contraception had a high level of EC knowledge. It could therefore be concluded that in the face of high premarital sexual activities, emergency contraception awareness was also high. This goes to affirm the assertion that high EC knowledge exist in European countries, this current study therefore sought to fill the contextual gap in the study.

Williams, Jauk, Szychowski and Arbuckle (2021) conducted a study among adolescent patients to explain their perception and knowledge of emergency contraception and current usage patterns. Data was gathered from 253 female patients within the ages of 14 and 21 who visited Pediatric and Gynecology clinic. The study revealed that 80.2 percent of respondents were aware of emergency contraceptive pills and knowledge was higher among older adolescents than their younger counterparts. It was also found that involvement in sexual activities was associated with having correct information about emergency contraception. This study made use of only females but the current study would fill the gap by using both male and female adolescents.

Chofakian, Borges, Sato, Alencar, Santos and Fujimori (2016) conducted a study to test how awareness of emergency contraception influences its use, with a sample of 307 students within the ages 15 to 19 selected from private and public middle schools in Southeast Brazil. Data collected with a questionnaire was analyzed with a structural equations model. The results indicated that sexual debut for 59.3 percent of respondents was at the age of 15 or older. It was recorded there were more wrong answers to seven of the ten questions that were used to measure knowledge of emergency contraception, indicating limited knowledge of emergency contraception in the face of high premarital sexual activity. Knowledge of emergency contraceptives was found to be significantly associated with type of school participant attended, age at which they started sexual activities and knowledge of someone who has used emergency contraceptive. This current study sought to fill the methodological and contextual gap in the study.

Davis, Sarasveni, Krishnan, Bhat and Kodali, (2020) found in India that respondents had moderate knowledge of emergency contraceptives in a study conducted to investigate the attitudes and knowledge of college students have regarding EC. A cross-sectional study method was adopted and data was collected from 758 respondents with a semi-structured questionnaire which was analyzed, and revealed that 23 percent had low level of awareness, 60.1 percent had moderate awareness level and 16.9 percent had high level of awareness. The level of knowledge was significantly associated with being older, married, attending a private institution, having of lower socio-economic background and being a Muslim. It was also found that 55.2 percent of respondents did not agree that knowledge of emergency contraception promoted promiscuity. This

position is not the same as that of respondents in another study conducted in India among 200 young doctors where majority of the respondents agreed that emergency contraception promotes risky behaviours and promiscuity among young people (Panda, Das, Das, Sharma & Sharma, 2021). Although Panda et al. conducted their study among older students it provides information on young people's knowledge on contraception, however, this current study sought to use adolescent respondents.

In a cross-sectional study performed among a sample of 582 female students in a university in South Africa by Hoque and Ghuman (2012), the results indicated that the average age of respondents was 20.9 years and 49.8 percent of respondents had heard of emergency contraception, 69.6 percent were not aware that a prescription was not needed to obtain emergency contraceptive from a pharmacy, 29.7 percent were ignorant of the correct time within which emergency contraceptive is effective when taken. Although responses indicated a low contraceptive knowledge, premarital sexual activity was high. It was reported that 53.2 percent of respondents had engaged in sexual activities, and knowledge of emergency contraceptives were associated with age, engagement in sexual activity and residential status. Being older was associated with contraceptive knowledge and students who were sexually involved were twice more knowledgeable about contraception. This current study sought to fill methodological gap by using a mixed method approach as well as both male and female respondents.

This however differ from the results of University of Benin, Nigeria, where Aziken, Okonta and Ande (2003) conducted a study among female undergraduate students to explore their emergency contraception knowledge

and their perception about it. 880 respondents aged 15-24 were randomly sampled to respond to questionnaire while EPI Info 2000 version 1.0 software package was used to analyze data. It was reported that 43 percent of respondents were involved in sexually activities, 58 percent of participants had heard of emergency contraception although some had wrong information; an indication of high level of awareness of contraception and low sexual activities. It was further found that being sexually active, having ever used contraception and having been in a higher class in the university were significantly associated with more knowledge of contraception. Although Aziken et al.'s study had a similar context as this study, this current study sought to fill the gap by using both male and female students as well as focus group discussion in the data collection.

A study carried out later in Ilorin, Nigeria by Babatunde, Ibirongbe, Omede, Babatunde, Durowade, Salaudeen and Akande (2016) confirmed the findings of Aziken et al. (2003) as it was reported that almost half of respondents had a fair knowledge of emergency contraceptives, 75.8 percent were aware of what emergency contraception is used for and 66.7 percent knew of the correct timing of its usage. This study used multi-stage sampling method and questionnaire for collecting data to assess emergency contraception awareness and its usage among students in public secondary school. Although this Ilorin study used secondary school students like in this current study, that study used only questionnaire in gathering data whereas the current study used a mixed method approach in collecting and analyzing data.

Rokicki and Merten (2018) reported that awareness of emergency contraception has risen in Ghana over the past few years. This they indicated is evident by the rise in the number sexually active unmarried women who knew

of emergency contraception from 49 percent in 2008 to 80 percent in 2017. Further, a study aimed at exploring factors associated with awareness and use of EC conducted among University of Cape Coast students by Darteh and Doku (2016) realized that 72 percent of male students and 59 percent of female students were involved in sexual activities, 57 percent of participants knew of emergency contraceptives and females had more knowledge than their male counterparts although males were more sexually active than the females. In the presence of high contraceptive knowledge, sexual activities were high among students. The situation is not any different from what Amalba, Mogre, Appiah and Mumuni (2014) found among women aged 15-49 in the Northern region of Ghana where it was realized that 69 percent of respondents knew of emergency contraceptives. Of the number of respondents with knowledge of emergency contraception, 85 percent had accurate information on when it is supposed to be taken to ensure its effectiveness in preventing pregnancy. Although studies have been conducted on knowledge of emergency contraception in the Ghanaian context, there is still a gap which the current study sought to fill. The current study sought to find out if relationship exist between knowledge of contraceptives and attitudes towards premarital sex.

Difference in Attitudes towards Premarital Sex with regards to Knowledge of Modern, Natural and Emergency Contraception

In a descriptive survey carried out among 100 teenage students in India to establish the association between contraceptive knowledge and attitudes towards premarital sex, data was collected with a questionnaire and it was found that respondents had high knowledge about permanent and natural methods of contraception as compared to other areas (Jose et al., 2019). Attitudes towards

premarital sex was negative and a weak positive correlation was found between knowledge and attitude indicating that an increase in contraceptive knowledge correlated with increase in negative attitude towards premarital sex. This current study sought to fill the gap in Jose et al.'s study by looking at the relationships with each contraceptive type while using both male and female respondents.

Moyo and Rusinga (2017) carried out a study in Zimbabwe among adolescents to explore their attitudes, knowledge, practices and beliefs in relation to contraceptive usage. A cross-sectional study of 185 respondents made use of qualitative and quantitative data. The results revealed that adolescents had limited knowledge of natural contraception methods as 82 percent did not have knowledge of any natural contraception method. Of the 18 percent who knew of natural methods, 89 percent knew of breastfeeding as method of birth control, 11 percent mentioned withdrawal method and none knew of periodic abstinence as a natural family planning method. However, knowledge of modern methods of contraception was universal with 98 percent of respondents acknowledging their awareness of them. The commonly known method was condom, followed by pills, injectables and lastly implants with no knowledge of female and male sterilization and IUD. It was reported that sexual activity was uncommon among adolescents as 38 percent consented to having had sex before. Although knowledge of the various types of contraceptive differ, premarital sexual activity was uncommon among respondents. Although Moyo and Rusinga's study used the same method as this current study, the current study sought to go further to establish differences in attitudes towards premarital sex between adolescents with knowledge of modern, natural and emergency contraceptives.

Nsubuga, Sekandi, Sempeera and Makumbi, (2016), in a survey conducted at Makerere University in Uganda among female undergraduate students to ascertain their perceptions, knowledge, attitudes and their contraceptive usage, it was found that almost everybody knew of contraceptive (99.6 %). Knowledge of modern methods was high with pills (86.7 %) being the commonly known type followed by male condoms (88.4 %), injectables (50.3 %), IUDs (35 %), implants (26.7 %) and female condom (22.1 %), while the most known natural method was the withdrawal method (34.2 %). It was also found that sexual activities were high as it was reported that (70%) of respondents had ever engaged in sexual intercourse, an indication of permissive attitudes towards premarital sex. Although Nsubuga et al.'s work provided information on knowledge of contraception, this current study sought to find differences in attitudes towards premarital sex based on knowledge of contraceptive types.

Awusabo-Asare et. al. (2006) in their 2004 National Survey of Adolescents conducted among 12–19-year-olds in Ghana found a high level of contraceptive knowledge and a large number of adolescents who had information on pregnancy prevention expressed favourable dispositions towards contraceptive methods. Adolescents were of the view that giving adolescents information about contraceptives would not make them promiscuous. In a cross-sectional survey of 100 males and 250 females aged 18-24 in Accra Ghana to determine the determinants of contraceptive use, showed that sexual debut was early and 91 percent of participants were in sexual relationships during the period of data collection. Knowledge of both natural and modern contraceptives was universal with condom being the commonest

known one, followed by withdrawal method, pill, injectables, rhythm and emergency contraception. Diaphragms, lactational amenorrhea, implant, male and female sterilization and IUDs were the least known contraceptive methods (Grindlay, Dako-Gyeke, Ngo, Eva, Gobah, Reiger, Chandrasekaran & Blanchard, 2018). Although Grindlay et al.'s study is similar to this current study in context, the current study sought to find out differences in attitudes towards premarital sex based on knowledge of contraception using a mixed method approach.

Summary of Literature Review

The review of literature began with a theoretical review. Psychoanalytic theory of adolescence and attitude formation and Theory of Reasoned Action was reviewed as theoretical basis for the work. Three contraceptive types: modern, natural and emergency were identified. A conceptual framework which explained the relationship between knowledge of modern, natural and emergency contraceptives and attitudes towards premarital sex was also reviewed. Literature was also reviewed on knowledge of contraception, attitudes towards premarital sex, knowledge of modern contraceptives and attitudes towards premarital sex, knowledge of natural contraceptives and attitudes towards premarital sex, knowledge of emergency contraceptive and attitudes towards premarital sex and differences in attitudes towards premarital sex based on knowledge of the various types of contraceptives. It was found that knowledge of contraceptives has improved over the years among young people and the introduction of sexual education in schools have been partly associated with this development.

It was found that attitudes toward premarital sex was permissive although variations existed in different areas. A high level of contraceptive knowledge was found to be associated with negative attitudes towards premarital sex. Although there exists much literature, this study sought to bridge methodological, contextual and content gap in literature.



CHAPTER THREE

RESEARCH METHODS

Introduction

The study sought to investigate the relationship between knowledge of contraceptives and attitudes towards premarital sex among adolescents in senior high schools in Asante Akim North District. This chapter deals with the research methods and techniques that were used in carrying out the study. It consists of the design, the population, sample and sampling procedure, research instrument, reliability and validity of the instrument, data collection and data analysis procedure.

Research Design

The mixed-methods approach, specifically the explanatory sequential mixed method was employed for the study. An explanatory sequential research method, according to Subedi (2016) is a two-phased mixed method that is comprised of the collection and analysis of quantitative data, and a later collection of qualitative data to elaborate on quantitative results. This method allows the researcher to collect and analyze data quantitatively which gives a clear view of the research problem, and through qualitative means, participants in-depth view is sought to explain the statistical results. With this approach, quantitative data is greatly emphasized than the qualitative data and findings are integrated at the interpretation stage of the study.

This method is advantageous because according to Sami (2016), the researcher collects the two types of data in distinct phases, that is, one type of data at a time. Also, report writing with this method is easy and straightforward. This method provides comprehensive knowledge of the study problem.

However, the conduct of this study is time-consuming as different types of data are collected at different times. Since the study looked at attitudes, knowledge and established relationships, the explanatory sequential method is considered appropriate for the study.

Study Area

The study area was Asante Akim North District. The study area forms part of the 43 Metropolitan, Municipal and District Assemblies in the Ashanti Region. Agogo being its capital was carved from Asante Akim North Municipality, one of the new districts and municipalities inaugurated on the 28th June, 2012. The District is located within latitudes $6^{\circ} 30'$ and $7^{\circ} 30'$ North and longitudes $0^{\circ} 15'$ and $1^{\circ} 20'$ West. The district is located at the eastern part of the Ashanti Region and forms part of the regional boundary dividing the Ashanti and Eastern Regions. It shares boundaries with the Sekyere Kumawu District in the north, Kwahu East in the east, Asante Akim South District in the south and the Sekyere East District in the west. It covers a land area of 1,126 square kilometers constituting 4.6 percent of the region's land area 24,389 square kilometers (Ghana Statistical Service, 2014).

According to 2010 population census, the total population was 69,186 that is 1.4% of the Ashanti Region's population. The distribution of the population by sex indicates that the female population is 51.2 percent. This gives a sex ratio of 95.1 making it greater than that of the Ashanti Region (94.0). This implies that there is a predominance of females in the district. The rural-urban differentials indicate that more people live in the rural areas in comparison to the urban zones. Those below 20 years in the district were 50.6% which indicates a youthful population (GSS, 2014) and has a high fertility rate

which is higher than that of the region with teenagers contributing to 0.7% of children ever born.

Within the household structure, 17.4% of households in the district are headed by women and 21.6% form the single-parent family household. A high proportion of females than males contribute to family work or work casually and this weakens the ability of women to contribute financially to the up keep of their families (GSS, 2014) and with household headed by women, there may be lack of parental control which gives adolescents freedom to engage in premarital sex (Oheng, 2019). This area is chosen for the study because most of the populace in the district are youthful and coupled with the incidence of teenage pregnancies, it is appropriate to find out adolescents' level of knowledge of contraceptives.

Population

Population is explained by Amedahe and Gyimah (2019) as the target group about which the researcher intent to getting information and drawing conclusions. It is an entire group about which information is required. All students in the three SHS in the Ashanti Akim North District estimated to be 7753 (Table 1) formed the study population. The accessible population were students of two schools (i.e., Ananekrom SHS and Pataban SHS) with a total number of 6181.

Table 1: Population Distribution of Schools in Asante Akim North District

Schools	Number of Students
Ananekrom Senior High School	3480
Pataban Senior High School	2701
Aboam Senior High School	1572
Total	7753

Source: Ashanti Akim North Directorate of Education (2019)

Sampling Procedure

The sampling frame was 6181 students in two senior high schools in the district (Ananekrom SHS and Pataban SHS). The convenience sampling technique was used to select these schools because both are located in the same vicinity and have similar characteristics, and also the accessibility of these schools to the researcher. A sample size of three hundred and sixty-one (361), based on Krejcie and Morgan (1970) sample size determination table was used. The sample size selected was based on the sample size determination for population of 6000 at 95 percent confidence level. The sample size (n) was calculated according to the formula: $n = z^2 * p * (1 - p) / e^2$

In selecting participants for the study, proportional stratified sampling technique was used. This was because of differences in student population in the schools and differences in gender population. This ensured that each school and gender had an equal representation in the sample. In arriving at the size of the stratum, the researcher used the formula of (stratum size/population size) x sample size (Foley, 2018). In selecting the participant for the study, simple random sampling was used to select participants from each stratum after

stratification to respond to items on the questionnaire. This is represented in Table 2.

Convenient sampling technique was later used, after the analysis of the quantitative data, to select 15 students according to Guetterman's (2015 as cited in Sarfo, Debrah, Gbordzoe, Afful & Obeng, 2021) recommendation of an average sample size of 15 within the range of 8 and 31 for qualitative educational research, to participate in a focus group discussion. 8 students from Ananekrom SHS, making up of 4 boys and 4 girls, and 7 students from Pataban SHS; 4 boys and 3 girls were selected from those who responded to the questionnaire to partake in the focus group discussion. These students were selected from each of the classes that responded to the questionnaire. The number of participants for each group was decided on based on the rule of thumb that participants of focus group discussion should not be more than 12 and not less than 6 (George, 2023). Also, because explanation was needed for some findings of the quantitative data, Creswell (2006) suggested that for such purposes, the participants that can best explain the findings should be selected for the qualitative data and for this study researcher decided to use respondents of the questionnaire so they can best explain the reasons for the findings of the quantitative data.

Table 2: Students Selected for the Study

Schools	Gender	Population		Sample	
		N	%	N	%
Ananekrom SHS	Boys	1953	31.6	114	31.6
	Girls	1527	24.7	89	24.7
Pataban SHS	Boys	1384	22.4	81	22.4
	Girls	1317	21.3	77	21.3
Total	--	6181	100.0	361	100.0

Data Collection Instrument

A questionnaire and focus group discussion guide were used in data collection. McLeod (2018) explains that a questionnaire is useful for research that seeks to gather information to measure attitudes, behaviours and opinions, and since this study sought gather information concerning attitudes and knowledge, it was deemed as the appropriate instrument for the study.

The questionnaire was close ended and had five sections. Section (A) contained items that gathered information about the demographic characteristics of respondents. Section (B) comprised of questions to gather information on knowledge of modern contraceptives which was adapted from what was used by Twum (2018) in the study, “female adolescents’ knowledge, access and usage of contraceptives in three selected junior high schools, in the cape coast metropolis”. The questionnaire of Twum investigated knowledge, availability, personal experience and barriers to contraceptive usage but this was not the focus of this study and therefore the need for it to be adapted to suit this current study. The portion on knowledge was adapted for this study. Section (C) consisted of items on knowledge of natural contraceptive methods and section (D) contained items on knowledge on emergency contraceptive methods which

are researcher made. With the exception of section (A), the items in these sections were measured on a four-point Likert scale starting from 1=Strongly Disagree, 2=Disagree, 3=Agree and 4=Strongly Agree.

Section (E) of the questionnaire contained items on attitudes towards premarital sex which was a modified questionnaire of “Adolescent’s Attitudes towards Premarital Sex Questionnaire (AATPSQ)” designed by Nwankwo (as cited in Eze, 2014). This was made up of 17 items that were stated in favour of premarital sex. This was measured on a two-point Likert scale of 2 = “true of me” and 1= “not true of me”.

A focus group discussion guide was used to complement the questionnaire in gaining in-depth explanation for information gathered by the questionnaire. Based on the results of objective four, the researcher designed an interview guide which was used to conduct a focus group discussion for an in-depth understanding on why attitudes are negative irrespective of high knowledge of contraceptive types. This was made up of nine questions to illicit initial responses for further probing questions.

Pre-testing of Instrument

Pretest according to Ruel, Wagner, and Gillspie (2016) enables the researcher to ensure clear articulation of questions and that the response options are significant, wide-ranging, and mutually exclusive; and not just in the researcher’s own approximation. Before the pretest, the questionnaire and the focus group discussion guide were given to my supervisors to clean and remove unclear and ambiguous questions. Pre-testing of the instruments was done at Konongo Odumase Senior High School. Based on Ruel et al recommendation of 12 to 50 participants for a pretest, 30 students were chosen. With the help of

Statistical Package of Social Sciences (SPSS) version 20, the pretested questionnaires were analyzed to determine internal consistency.

Validity and Reliability of the Instrument

In ensuring content validity, my supervisors examined the instrument in line with the objectives and the necessary inputs were made. Also, the challenges that were identified during the pretest were addressed and the necessary changes were effected. The reliability of the instruments was ensured by pretesting. The data gathered from the 30 students was inputted into SPSS and a Cronbach Alpha of 0.919 was obtained for modern contraceptives, 0.760 for natural contraceptives, 0.731 for emergency contraceptives and 0.921 for attitudes towards premarital sex which are consistent with Taherdoost (2016) recommendation of Cronbach Alpha of 0.7 for internal consistency.

Data Collection Procedures

Prior to data collection, researcher obtained ethical clearance from the Institutional Review Board in the University of Cape Coast. After, letter of introduction was taken from the College of Distance Education and with this letter, the researcher sought permission from the heads of the schools to conduct this study.

Two research assistants who are teachers and colleagues of the researcher were given orientation by researcher about the study and the process of data gathering. Their roles in the data gathering process was well explained before the day of data collection. On each day of data collection, informed consent of the students was sought. They were asked of consent and were made to understand that participation is voluntary and that they could back out of the study any time. The purpose of the study was explained to them to enable them

make the choice of participating in the study or not. None of the respondents backed out of the study.

On the day of data collection, students were sampled according to classes and the questionnaires administered to them in their respective classrooms. Before the administration of the questionnaire, respondents were prepared to understand that the information they were providing was going to be used for purely academic work and the information they provide was not going to be used anywhere against them. To ensure that, they were not required to provide any form of identification. The procedures were then explained to them after which the questionnaires were distributed to students, one for each person for them to answer. The completed questionnaires were then collected immediately.

The researcher later went back to the schools to conduct the focus group discussion. This was done on two different days, a day at each school when classes had closed. It was conducted at this time so students would have enough time and also access to classroom to give privacy so students can conveniently express themselves. The discussions were recorded and later transcribed for analysis.

Data Processing and Analysis

The data was coded, edited and labelled, and inputted into the Statistical Package for Social Sciences (SPSS) version 20 for analysis. The quantitative data was analyzed with descriptive and inferential statistics. However, before determining the relationship between variables, descriptive statistics in the form of (percentages, frequencies, mean and standard deviation) were used to describe the distribution of responses. Although data provided from these

analyses did not contribute directly to answering the key research objectives, it was intended to explore the data for explanatory purposes and for further discussions.

Pearson Product Moment Correlation Coefficient was used to determine the relationships between the predictor variables (knowledge of modern, natural and emergency contraceptives) and the outcome variable (attitudes towards premarital sex) and also test hypothesis at a significance level of 5%. One-way Analysis of Variance (ANOVA) was used to investigate differences in attitudes towards premarital sex with regards to knowledge of modern, natural and emergency contraceptives.

Data gathered from the focus group discussions were analyzed manually using thematic analysis to identify common themes to explain the findings of the quantitative data.

Ethical Considerations

Permission was sought from the University of Cape Coast, Institutional Review Board. With introduction letter from the College of Distance Education, permission was taken from school authorities. Participants' informed consent was sought concerning their involvement in the study. They were made to understand that their participation was voluntary and they could withdraw from the study any time. Confidentiality and anonymity were assured as participants were not required to provide any form of identification. Also, due to the sensitive nature of the issues under study, researcher ensured that students were given privacy without any interference or presence of teachers and school authorities. Again, researcher ensured that the words used to the questionnaire

were not embarrassing. After the data has been collected, researcher ensured that responses were kept confidential.

Chapter Summary

This chapter dealt with the research method used in the study, the research area, population, sample size, sample size determination and sampling method. It also described the instrument for data collection, the procedure for data collection and analysis of the data.



CHAPTER FOUR

RESULTS AND DISCUSSIONS

Introduction

This chapter presents the results of the study and discusses them in the light of the research objectives that guided this study. The specific objectives of the study were to assess the relationship that exist between adolescents' knowledge of modern contraceptives and their attitudes towards premarital sex, assess the relationship that exist between adolescents' knowledge of natural contraceptives and their attitudes towards premarital sex, assess the relationship that exist between adolescents' knowledge of emergency contraceptives and their attitudes towards premarital sex and assess the differences in attitudes towards premarital sex of adolescents with knowledge of modern, natural and emergency contraceptives.

The data used in the research were obtained through the administering of structured questionnaire and focus group discussion. The chapter begins with the Socio-demographic characteristics of the respondents and followed by the sections that answer the research objectives and hypothesis.

Demographic Characteristics of Respondents

The study administered 361copies of a questionnaire which were completely filled (translating to 100% response rate). However, responses of 337(93.4%) respondents who responded to having heard of contraceptives was used for answering the research objectives. First, adolescents' demographic characteristics which included gender, age and religious affiliation and their sexual relationships were sought. Although it has no research objectives, the findings were used to aid in the analyses and discussion of other research

objectives. The responses on participants' demographic characteristics are summarized in Tables 3 and 4.

Table 3: Demographic Characteristics of Respondents

Variables	Categories	Frequency	Percentage
Gender	Female	168	46.5
	Male	193	53.5
Age	15-19	311	86.1
	20-24	50	13.9
Religious Affiliation	Christianity	260	72.0
	Islam	74	20.5
	Traditional	27	7.5

Source: Field Data (2020)

From Table 3, 168 (46.5%) of the respondents were females whereas 193(53.5%) were males. Most of the participants (86.1%) were within the age group 15-19 and (13.9%) of respondents are within the age group of 20-24. The results in Table 3 shows that majority of the respondents 260 (72.0%) were Christians while the remaining 74 (20.5%) and 27 (7.5%) were Muslim and traditionalist respectively.

Table 4: Sexual Relationships of Respondents

Item		YES n(%)	NO n(%)	Total
Are you in a relationship?	Male	106(54.9)	87(45.1)	193(100.0)
	Female	129(76.8)	39(23.2)	168(100.0)
	Overall	235(65.1)	126(34.9)	361(100.0)
Have you been sexually active before?	Male	81(42.0)	112(58.0)	193(100.0)
	Female	62(39.9)	106(63.1)	168(100.0)
	Overall	143(39.6)	218(60.4)	361(100.0)
Have you heard of contraceptives before?	Male	180(93.3)	13(6.7)	193(100.0)
	Female	157(93.5)	11(6.5)	168(100.0)
	Overall	337(93.4)	24(6.6)	361(100.0)

Source: Field Data (2020)

The results in Table 4 show that majority of the participants 235(65.1%) were engaged in a sexual or romantic relationship during the period of data collection while 126(34.9%) were not. In connection with gender, more females (76.8%) had boyfriends as compared to males (54.9%) having girlfriends. The results further showed that 143(39.6%) of the participants had engaged in sexual intercourse prior to data collection time. Although the majority of the adolescents had not engaged in sex before, more males (42%) than females (39.9%) intimated that they have had sexual encounters before. Moreover, the results show that almost all (93.4%) had heard of contraceptives and what they are used for. The trend of results was similar across gender lines.

Adolescents' Knowledge of Modern Contraceptives

Respondents' knowledge on modern contraceptives was assessed to provide information needed to address the research objectives. To assess respondents' knowledge of modern contraceptive, respondents were asked to rate their levels of knowledge on nineteen items used in measuring respondents' knowledge on modern contraceptive. The items were measured using strongly disagree, disagree, agree and strongly agree coded 1 to 4 respectively, indicating 1 as least rating and 4 as highest rating of knowledge of modern contraceptives. Means and standard deviation were computed as shown in table 5.

Table 5: Knowledge of Modern Contraceptive

Statements	Mean	SD
Contraceptive use does not provide 100% protection from pregnancy	2.953	1.034
Pregnancy prevention can be done by both males and females	3.056	1.003
Contraceptive use is beneficial for couples for spacing pregnancies	3.068	1.005
Some contraceptive types can be taken orally	2.836	1.024
Some contraceptive types are in the form of injections	2.855	1.020
Intrauterine devices are types of contraceptive	2.839	1.039
Male condom is a type of contraceptive	2.979	1.023
Cervical cap is a form of contraception	2.594	1.016
Female condom is a type of contraceptive	2.958	1.016
Spermicides is a form of contraception	2.819	1.044
Implant is a form of contraceptive	2.706	0.999
Sterilization is a type of contraceptive	2.727	1.073
Condoms are not reusable	3.097	0.999
Sterilization is a permanent method of contraceptive	2.623	1.033
Injectable contraceptive is repeated once every 1,2 and 3 months	2.602	0.964
Intrauterine device is inserted in the womb	2.735	1.990
Implant is inserted in woman's arm for a period of 3 to 5 years to prevent pregnancy	2.483	1.110
Weight gain is a side effect of contraceptive	2.658	1.154
Irregular menstruation is an effect of contraceptive	2.994	1.024
Mean of means	2.813	0.596

Source: Field Survey (2020)

Table 6 summarizes the means and standard deviations of the items used in assessing respondent knowledge on modern contraceptive. It indicated that condoms are not reusable was rated high [M= 3.097, SD = 0.993], which revealed respondents' opinions on the item relatively close to highest mean

value. Contraceptive use is beneficial for couples for spacing pregnancies was rated second [M = 3.068, SD = 1.005], demonstrating heterogeneous view of respondents around the mean. Contraceptive is both for male and female was identified as the third variables [M = 3.056, SD=1.003] indicating heterogeneous view of respondents.

The least measured items of knowledge of modern contraceptive are, sterilization is a permanent method of contraceptive [M = 2.623, SD = 1.033], injectable contraceptive is repeated once every 1,2 and 3 months [M = 2.602, SD = 0.964] and I know implant is inserted in woman's arm for a period of 3 to 5 years [M = 2.483, SD = 1.110]. The mean of means and standard deviation are 2.813 and 0.5967 skewed towards agreement of the knowledge of modern contraceptive. This indicates that since the mean of mean is $2.813 > 2$ and standard deviation $0.596 < 1$, it implies on the average respondents have a good knowledge of modern contraceptive in the study area.

Adolescents' Knowledge of Natural Contraceptive

To assess respondents' knowledge of natural contraceptive, respondents were asked to rate their levels of opinions on six items used in measuring respondents' knowledge on natural contraceptive. The items were measured using strongly disagree, disagree, agree and strongly agree coded as 1 to 4 respectively, indicating 1 as least rating and 4 as high rating of knowledge of natural contraceptives. Means and standard deviation were computed as shown in table 6.

Table 6: Knowledge of Natural Contraceptive

Variables	Mean	SD
Pregnancy can be prevented by naturally	3.122	0.954
Pregnancy can be prevented without the use of medications and devices	3.086	0.933
Certain times of the menstrual calendar are safe for sex	3.219	0.905
A woman's menstrual cycle can be used to prevent pregnancy	3.142	0.892
The withdrawal method is a type of contraceptive	2.976	0.978
Exclusive breastfeeding for six months can prevent pregnancy	2.655	1.055
Mean of means	3.042	0.642

Source: Field Survey (2020)

Table 6 summarizes the means and standard deviations of the items used in assessing respondent knowledge on natural contraceptive. Results show they are aware that certain times of the menstrual calendar are safe for sex was rated high [M= 3.219, SD = 0.905], which revealed respondents' opinions on the item relatively close to mean value. They know that they can avoid pregnancy by using the menstrual cycle was rated second [M = 3.142, SD = 0.892], demonstrating homogeneous view of respondents around the mean. They are aware of natural family planning was identified as the third item [M = 3.122, SD = 0.954] indicating homogeneous view of respondents.

The fourth rated item is they are aware that pregnancy can be prevented without medications [M = 3.086, SD = 0.933]. They know that withdrawal method is a type of contraceptive was rated fifth item [M = 2.976, SD = 0.978] and exclusive breastfeeding for six months can prevent pregnancy was identified as sixth variable [M = 2.655, SD = 1.055]. The overall mean and standard deviation are 3.042 and 0.642 skewed towards agreement of the knowledge of natural contraceptives. This indicate that since the overall mean $3.042 > 2$ and overall standard deviation $0.642 < 1$, it implies on the average

respondents have a good knowledge of natural contraceptives and this knowledge is homogenous.

Adolescents' Knowledge of Emergency Contraceptive

In order to examine respondents' knowledge of emergency contraceptive, respondents were asked to rate their levels of opinions on six items used in measuring respondents' knowledge on emergency contraceptive. The items were measured using strongly disagree, disagree, agree and strongly agree coded as 1 to 4 respectively, indicating 1 as least rating and 4 as high rating of knowledge of emergency contraceptives. Means and standard deviation were computed as shown in table 7.

Table 7: Knowledge of Emergency Contraceptive

SN	Variable	Mean	SD
1	Emergency contraceptives can be used to prevent pregnancy after unprotected sex	2.864	1.060
2	When emergency pill is taken within 5 days of unprotected sex, it can prevent pregnancy	2.582	1.055
3	The sooner an emergency pill, the more effective it will be in preventing pregnancy	2.658	0.966
4	Emergency pill cannot be used to replace a regular contraceptive	2.763	1.001
5	Emergency pill make one experience her period earlier or later than usual	2.836	0.985
6	Copper intrauterine device can serve as an emergency contraceptive	2.706	1.057
Mean of means		2.735	0.741

Source: Field Survey (2020)

Table 7 summarizes the means and standard deviations of the items used in assessing respondents' knowledge on emergency contraceptive. Results show they are aware that emergency contraceptives can prevent pregnancy after

unprotected sex was rated high [$M = 2.864$, $SD = 1.060$], which revealed respondents' opinions on the item relatively dispersed from the mean value. They know that emergency pill makes one experience her period earlier or later than usual was rated second [$M = 2.836$, $SD = 0.985$], demonstrating homogeneous view of respondents around the mean. They are aware of emergency pill cannot be used to replace a regular contraceptive was identified as the third variables [$M = 2.763$, $SD = 1.001$] indicating heterogeneous view of respondents.

The fourth rated item is they are aware that a copper intrauterine device can serve as an emergency contraceptive [$M = 2.706$, $SD = 1.057$]. The sooner one takes an emergency pill, the more effective it will be in preventing pregnancy was rated fifth item [$M = 2.658$, $SD = 0.966$] and emergency pill within 5 days of unprotected sex, it can prevent pregnancy was identified as sixth [$M = 2.582$, $SD = 1.055$]. The mean of means and standard deviation are 2.735 and 0.741 skewed towards agreement of the knowledge of emergency contraceptive. It implies that on the average respondents have a high knowledge of emergency contraceptive in the study area.

Adolescents' Attitude Towards Premarital Sex

In order to assess respondents' attitude towards premarital sex, respondents were asked to identify how some items apply to them in terms of their attitudes towards premarital sex. The statements of the items are "either true of me" or "not true of me". The statements were coded as 1 = not true of me and 2 = true of me. Means and standard deviation of the statement computed are shown in table 8.

Table 8: Attitude towards Premarital Sex

S/N	Statement	Mean	SD
1	I like engaging in premarital sex	1.349	0.477
2	I like to have sexual relations before marriage	1.415	0.493
3	I enjoy breast fondling	1.357	0.479
4	I enjoy sex play	1.332	0.471
5	I desire oral-genital sex	1.310	0.463
6	I like using pornographic materials	1.360	0.480
7	I like having intimate kissing	1.465	0.499
8	I cherish casual kissing	1.446	0.497
9	I cherish petting without affection before marriage	1.307	0.462
10	I cherish sex without affection before marriage	1.360	0.480
11	I enjoy petting with little affection before marriage	1.313	0.464
12	I enjoy sex with little affection before marriage	1.396	0.489
13	I have no problem with premarital sexual intercourse	1.473	0.500
14	I will not scold my girl/boy for having sexual intercourse with many boys/girls	1.482	0.500
15	I enjoy sexual intercourse before marriage	1.368	0.483
16	I don't see anything wrong sleeping with married men/women for money	1.254	0.436
	Mean of means	1.368	0.313

Source: Field Survey (2020)

The results, as presented in Table 9, showed that students would not sleep with men or women for money as the majority ($M= 1.254$; $SD = 0.44$) of the respondents admitted that it is wrong to sleep with married men/women for money. Respondents also admitted to not desiring oral-genital sex ($M= 1.310$; $SD= 0.46$). Respondents debunked that they cherish petting without affection before marriage ($M= 1.307$; $SD= 0.46$).

Also, respondents did not like having intimate kissing ($M= 1.465$; $SD = 0.50$). Students were not in support of their partners having other sexual partners as they responded that they would scold their boy/girl for having sexual intercourse with another boy/girl (Mean 1.482; $SD = 0.50$). Respondents also disagreed to the statement “I have no problem with premarital sexual intercourse” (Mean 1.473; $SD = 0.50$). The overall mean and standard deviation are 1.368 and 0.313 indicating that based on the response criterion coding [Not True of Me = 1, True of Me =2] respondents’ general attitude towards premarital sex in the study is below average of 1.5. These average responses among the adolescent is homogeneous for all the respondents, hence respondents have negative attitude towards premarital sex in the study area.

Table 9: Overall Attitude of Adolescents towards Sex

Overall Attitude	Frequency	Percent
Positive	116	32.1
Negative	245	67.9
Total	361	100.0

Source: Field Data (2020)

Hypothesis One

H_0 1: There is no statistically significant relationship between adolescents’ knowledge of modern contraceptives and their attitudes towards premarital sex.

In order to find out the relationship between adolescents’ knowledge of modern contraceptives and attitudes towards premarital sex, average responses of respondents on all items leading to assessing adolescent knowledge of modern contraceptive and their attitudes towards premarital sex were computed. The study employed Pearson Product Moment Correlation Coefficient

techniques to find out the relationship and the results of the analysis are shown in table 10.

Table 10: Correlation between Knowledge of Modern Contraceptive and Attitude towards premarital Sex

Variables	Attitude towards Premarital Sex		
	N	Pearson's Coefficient	P-Value
Knowledge of Modern Contraceptive	337	-0.127*	0.019

*Correlation is significant at 5% 2 tailed

Table 10 summarized the correlation coefficient of adolescent knowledge of modern contraceptive and attitude towards premarital sex [N =337, r = -0.127*, p-value = 0.019]. The result shows that there is significant negative relationship between adolescent knowledge of modern contraceptive and their attitude towards premarital sex however, the relationship is weak. An increase in adolescent knowledge of modern contraceptive will lead to a drop in their attitude towards premarital sex and vice versa in the study area. That is, as knowledge of modern contraceptive increase, attitudes towards premarital sex becomes negative. Based on the results, the null hypothesis “there is no statistically significant relationship between adolescents’ knowledge of modern contraceptives and their attitudes towards premarital sex” was rejected.

Hypothesis Two

H₀ 1: There is no statistically significant relationship between adolescents’ knowledge of natural contraceptives and attitudes towards premarital sex.

To assess the relationship between adolescents’ knowledge of natural contraceptives and attitudes towards premarital sex, averages responses of respondents on all variables leading to assessing adolescent knowledge of

natural contraceptive and their attitudes towards premarital sex were computed. The study employed Pearson Product Moment Correlation Coefficient technique to find out the relationship and the results of the analysis are shown in table 11.

Table 11: Correlation Between Knowledge of Natural Contraceptive and Attitude Towards Premarital Sex

Variables	Attitude towards Premarital Sex		
	N	Pearson's Coefficient	P-Value
Knowledge of Natural Contraceptive	337	-0.091	0.095

*Correlation is significant at 5% 2 tailed

Table 11 gives an illustration of the correlation coefficient of adolescent knowledge of natural contraceptive and attitude towards premarital sex [N =337, $r = -0.091$, $p\text{-value} = 0.095$]. The result shows that there is a negative relationship between adolescent knowledge of natural contraceptive and their attitude towards premarital sex. The relationship however is weak and not statistically significant as the $p\text{-value} = 0.095$ is greater than $p < 0.05$ (the threshold of statistical significance). Statistically, there is no relationship between knowledge of natural contraceptives and attitudes towards premarital sex. A rise in adolescent knowledge of natural contraceptive will not generally lead to a drop in their attitude towards premarital sex and vice versa in the study area. Based on the results, the null hypothesis, “there is no statistically significant relationship between knowledge of natural contraceptives and attitudes towards premarital sex” is maintained.

Hypothesis Three

H₀ 3: There is no statistically significant relationship between adolescents' knowledge of emergency contraceptives and attitudes towards premarital sex.

In order to ascertain the relationship that exists between adolescents' knowledge of emergency contraceptives and attitudes towards premarital sex, averages responses of respondents on all variables leading to assessing adolescent knowledge of emergency contraceptive and their attitudes towards premarital sex were computed. The study employed Pearson Product Moment Correlation Coefficient to find out the relationship and the results of the analysis are shown in table 12.

Table 12: Correlation Between Knowledge of Emergency Contraceptive and Attitude towards Premarital Sex

Variables	Attitude towards Premarital Sex		
	N	Pearson's Coefficient	P-Value
Knowledge of Emergency Contraceptive	337	0.136*	0.013

*Correlation is significant at 5% 2 tailed tests

Table 12 gives a summary of the correlation coefficient of adolescent knowledge of emergency contraceptive and attitude towards premarital sex [$N = 337, r = 0.136^*, p\text{-value} = 0.013$]. The result shows that there is a weak positive significant relationship between adolescent knowledge of emergency contraceptive and their attitude towards premarital sex. Although there exists a statistically significant relationship, the relationship is weak an indication that an increase in adolescent knowledge of emergency contraceptive will lead to a rise in positive attitude towards premarital sex and vice versa in the study area. That is, an increase in emergency contraceptive knowledge is associated with positive attitudes towards premarital sex. The null hypothesis "there is no statistically significant relationship between adolescent knowledge of

emergency contraceptives and their attitudes towards premarital sex” is rejected.

Hypothesis four

H 4: There is no statistically significant difference in attitudes towards premarital sex of adolescents with regard to knowledge of modern, natural and emergency contraceptives.

In order to examine the difference in attitude towards premarital sex of adolescents with knowledge of modern, natural and emergency contraceptives, adolescent with higher knowledge of modern, natural and emergency contraceptives were sorted out [those with computed average scores of 3 to 4]. The scores of these respondents with a good knowledge of contraceptives were paired with their attitude toward premarital sex responses before conducting analysis of variance (ANOVA). One-way analysis of variance (ANOVA) was mounted and descriptive statistics, Levene statistic, ANOVA results, and Welch robust test of equality of mean are shown in table 13, 14, 15 and 16.

Table 13: Descriptive Statistics

Knowledge of Contraceptives	Attitude towards Premarital		
	N	Mean	SD
Knowledge of Modern Contraceptives	130	1.326	0.3115
Knowledge of Natural Contraceptives	204	1.338	0.3064
Knowledge of Emergency Contraceptives	148	1.389	0.3033

Source: Field Survey (2020)

Results in Table 13 show that 130 out of 337 respondents who have heard of contraceptives before have higher knowledge of modern contraceptives and the average mean of their attitudes towards premarital sex is 1.326. Also 204 out of 337 respondents who have heard of contraceptives before have higher

knowledge of natural contraceptives and the average mean value of their attitude towards premarital sex is 1.338 while 148 out of 337 respondents who have heard of contraceptives before have higher knowledge of emergency contraceptives while the average mean value of their attitude towards premarital sex is 1.389. Results indicate that adolescent with high knowledge of modern contraceptives have scores of attitude towards premarital sex less than that of those with high knowledge of natural and emergency contraceptives. This implies that those with high knowledge of modern contraceptives have more negative attitudes towards premarital sex than those with high knowledge of natural and emergency contraceptives.

Table 14: Test of Homogeneity of Variance Level of Attitude towards Premarital Sex

Levene Statistic	df1	df2	p-value
0.197	2	479	0.821

Source: Field Survey (2020)

Results in Table 14 show the assumptions of homogeneity of variance test. From the Levene statistics test since the p-value of 0.821 is greater than the significant level of 0.05, we failed to reject the null hypothesis that equal variance is assumed and conclude that the groups have equal variance.

Table 15: Analysis of Variance (ANOVA)

Groups	Sum of Squares	df	Mean Square	F	p-value
Between Groups	0.331	2	0.166	1.758	0.174
Within Groups	45.107	497	0.094		
Total	45.438	481			

Source: Field Survey (2020)

Results in Table 15 show one-way analysis of variance conducted to find the difference in attitude towards premarital sex of adolescents with knowledge of modern, natural and emergency contraceptives. From the F-statistic table, the p-value of the F-stat of 1.758 is 0.174. This is greater than 0.05, thus we failed to reject the null hypothesis that there is no difference in the means of adolescent attitude towards premarital sex and that the means among the knowledge of contraceptives are equal. Further Welch robust test was performed to confirm the ANOVA results and are shown in table 16.

Table 16: Robust Test of Equality of Means

	Statistic	df1	df2	p-value
Welch	1.769	2	294.350	0.172

Source: Field Survey (2020)

Results in Table 16 show Welch robust test of quality of means. From the results, p-value of the Welch-stat of 1.769 is 0.172. This is greater than 0.05, thus the researcher failed to reject the null hypothesis that there is no difference in the means of attitude toward premarital sex for adolescent among different knowledge of contraceptive. This robust test confirms the analysis of variance (ANOVA) table. In essence, attitudes towards premarital sex does not differ based on the knowledge of modern, natural and emergency contraceptives. That is, attitudes towards premarital sex, which was found to be negative is the same irrespective of the type of contraceptive respondents are well vested in indicating that attitudes towards premarital sex are as a result of other factors and not necessarily the knowledge of contraceptives.

To provide detailed explanation for this position, focus group discussion was conducted. The discussion was recorded, transcribed and analyzed thematically. Common themes were picked to explain the reasons for negative

attitudes towards premarital sex irrespective of the high knowledge of contraceptive types. In the focus group discussion, it was found that religious reasons, fear of the side effects of contraceptives, fear of contraceptive failure, fear of unwanted pregnancies are some reasons adolescents gave for their negative attitudes towards sex before marriage although they had high level of contraceptive knowledge. Some disclosed that:

"I know about contraceptives and how to prevent pregnancy but I will not engage in premarital sex because I know it is sin. My pastor preaches against it." (Key Informant, 20 years, Girl, 3H1).

"To be honest, I am scared of engaging in premarital sex because I don't want to get pregnant. I know about contraceptive methods but I also know that it is not 100 percent; it can fail." (Key Informant, 19 years, 3H1).

"I am aware that contraceptives have some side effects. I will not want my girlfriend to suffer the negative consequences of using contraceptives so I prefer to stay away from having a girlfriend and engaging in premarital sex." (Key Informant, boy, 3B2)

Discussion

On finding the relationship that exist between adolescents' knowledge of modern contraceptives and their attitudes towards premarital sex, the study first assessed each construct with their assessed variables to determine its availability within the respondents. The study found that knowledge of modern, natural and emergency contraceptives was high among study respondents. This is in accordance with the results of Dangat and Njau, (2013) who indicated that majority of participants in their research had adequate information on how to prevent pregnancy and being in a higher class was the main determinant of

adequate knowledge on contraception which can be used to explain the high level of knowledge in the current study as respondents were final year students. This is also supported by the report of Tchokossa and Adeyemi (2018) where (61.5%) of the respondents in their study had sufficient contraceptive knowledge, a situation they explained is as a result of the inculcation of sex and health education into the secondary school curriculum. Having a high amount of information on emergency contraception was confirmed by the study of Tamire and Enqueselassie (2007) whose findings showed that about half of the students knew of emergency contraceptives. On specific types of emergency contraceptives, (83%) of the respondents mentioned pills and (34%) indicated IUCDs. However, the findings on natural contraceptives differ from that of Audu, Yahya and Bassi (2009) whose work revealed that awareness on natural FPM level was significantly less as compared to modern methods of contraceptives. The rhythm rate method was (50.7%), lactational amenorrhea method was (42.1%) and coitus interruptus was (36.1%). Generally, awareness of natural FPM was low among the respondents.

It was also realized from the study that attitudes towards premarital sexual intercourse was negative among study respondents. This finding is in line with that of Nhan, Phu, Tra, Phuong, Nhu, and Thu (2019) who reported that 65.9 percent of the participants refused premarital sex whilst 34.1 percent accepted premarital sex in different situations. Some of the situations upon which premarital sex was accepted included whether it was consensual and whether there was an understanding of contraceptives. This is not different from that of Bhatta, Koirala and Jha (2013), in their study where it was reported that 32.4 percent of respondents revealed premarital sexual activity to be

appropriate. The majority of respondents gave responses regarding the appropriateness of sex before marriage, that is, to keep close relation, to take sexual experience and to satisfy sexual desire.

However, this report is different from that of Wang et. al. (2007) where (60%) of young people had favourable dispositions concerning sexual intercourse before and posited that young adults could have premarital sex suppose they were to be in love or if they wanted to. About (8%) of the respondents did not support sex before marriage and one-third of respondents held neutral dispositions towards sex before marriage. Similar to the above, Muanda, Gahungu, Wood and Bertrand (2018), reported that most participants; both males and females had favourable attitudes towards premarital sex and several reasons were given for this disposition. Some of the reasons given were that: “premarital sex is a piece of evidence that a woman is captivating to men and abstinence from premarital sex might result in bareness in marriage, a form of showing gratitude, for experience and as a test of manhood whereas lack of parental supervision and financial benefits are reasons why girls favour premarital sex. The little number of participants who had a negative attitude towards premarital sex did so on the basis of health risks, the stigma around premarital sex and religious reasons.

Hypothesis One

The results also showed that there exists a significant negative relationship between adolescents' knowledge of modern contraceptives and attitudes towards premarital sex. This shows that if other factors are held constant an increase in adolescent knowledge of modern contraceptives is associated with negative attitude toward premarital sex and vice versa. This

result is concurred by that of Jose et al. (2019) who found a weak positive correlation between knowledge of contraceptives and attitude towards premarital sex. This indicates that as knowledge on contraception increased the negative attitude towards premarital sex also increased. This situation, Jose et al. explained it could be attributed to strong religious beliefs. Similar to this, Frost, Lindberg and Finer (2012) found that the odds of looking forward to having unprotected sex in 3 months' time decreased by 9 percent for each correct response on a contraceptive knowledge scale. That is, as knowledge of contraception increase, the likelihood of engaging in premarital sex decreased. In addition to this, Wong (2012) found a significant inverse link between premarital sexual attitude scores and knowledge scores. It was also found that the group with significantly low scores in contraceptive awareness and knowledge had an increasingly higher permissive attitude towards sex. That is, those with low contraceptive knowledge had positive attitudes towards premarital sex. In essence, a high knowledge of contraception is associated with negative attitudes towards premarital sex while a low level of contraception knowledge is associated with positive attitudes towards premarital sex.

Sharma et al. (2021) also found a contrary situation from that of the current study when their study revealed a high contraceptive knowledge in the face of positive attitudes towards premarital sex which is evidenced by the high level of premarital sexual activities.

Zhou, Wang, Ye, Gu, Zeng and Wang (2012) also reported from their study that although majority of college students had limited knowledge regarding contraception, attitude towards premarital sex was permissive. Again, contrary to the current findings, Khajehei, Ziyadlou and Ghanizadeh (2013)

reported from their study that although contraceptive knowledge was generally low for both males and females, scores on adolescent attitude, and behavior towards premarital sexual activities was generally low. That is, in as much as knowledge of contraception is low, attitudes towards premarital is also negative.

From the discussions, it is realized that inconsistencies exist concerning the relationship between knowledge of modern contraception and attitudes towards premarital sex. However, a good sexual education that gives adequate information on modern contraception is necessary in dealing with premarital sexual activities among adolescents. That is, knowledge of contraception does not make adolescents promiscuous as speculated but rather, it equips them with the correct knowledge to enable them choose rightly on issues concerning their reproductive health.

Hypothesis Two

The study further tested the hypothesis that “there is no statistically significant relationship between adolescents’ knowledge of natural contraceptives and their attitudes towards premarital sex. The alternative hypothesis was rejected in favour of the null hypothesis that the relationship between knowledge of natural contraception and attitudes towards premarital sex was not significant. That is although a weak negative relationship exists between them, it is not significant and so if other factors are held constant an increase in adolescent knowledge of natural contraceptives is not associated with negative attitude toward premarital sex and vice versa.

The report from this study contradicts that of Jose et al., 2019 who reported that respondents in their study had high knowledge of natural contraception methods whereas attitudes towards premarital sex was negative.

A weak positive correlation was found between knowledge and attitude indicating that an increase in contraceptive knowledge correlated with increase in negative attitude towards premarital sex.

This finding does differ from what Moyo and Rusinga (2017) reported from their study where adolescents had limited knowledge of natural contraception methods as 82 percent did not have knowledge of any natural contraception method and sexual activity was uncommon among adolescents as 38 percent consented to having had sex before. Further, this corroborate that of Unseld et al. (2017), who explained that knowledge of natural contraception did not promote promiscuity but rather enabled respondents to gain a better understanding of their bodies. Further, it was found that three-quarters of women and about two thirds of men explained that using natural contraception has made their relationship better as it has helped them to have discussions concerning their sex life and improved their sexual life on a whole although fewer than 10 percent felt it had not. Also, about 80 percent of respondents with children indicated that the knowledge they have gained through the usage of natural contraception has enabled them to give their children proper sex education.

Knowledge of natural contraception is not a reason for promiscuous behaviours but because it based on the woman's reproductive system, a good education about them will give adolescents a better understanding of their bodies and how it functions. Therefore, education about natural methods of contraception should be intensified.

Hypothesis Three

On the relationship that exist between adolescents' knowledge of emergency contraceptives and their attitudes towards premarital sex, the study tested the hypothesis that there is no statistically significant relationship between adolescents' knowledge of emergency contraceptives and attitudes towards premarital sex using Pearson's moment correlation coefficient as presented by table 10. Results show that a positive significant relationship exists between adolescents' knowledge of emergency contraceptives and attitudes towards premarital sex. This shows that if other factors are held constant an increase in adolescent knowledge of emergency contraceptives is associated with favourable dispositions towards premarital sex.

Similar to the findings of this study, Williams, Jauk, Szychowski and Michaud, (2021) found that 80.2 percent of respondents were aware of emergency contraceptive pills and higher knowledge was associated with being older and an involvement in sexual activities. That is, a high knowledge of contraception was associated with involvement in premarital sex. This is also similar to what Ottesen, Narring, Renteria and Michaud (2002) found in Switzerland where they found a high knowledge of emergency contraception among adolescents who engage in sexual intercourse before marriage. That is, an indication of positive attitudes towards premarital sex among adolescents with high knowledge of emergency contraceptive. This position is in accordance with that of respondents in another study conducted in India among 200 young doctors where majority of the respondents agreed that emergency contraception promotes risky behaviours and promiscuity among young people (Panda, Das, Das, Sharma & Sharma, 2021).

In corroboration to this, Muhammad and Shanaz, (2012) reported from their study in South Africa that although responses indicated a low contraceptive knowledge, premarital sexual activity was high, and knowledge of emergency contraceptives was associated with age, engagement in sexual activity and residential status. Being older was associated with contraceptive knowledge and respondents who engaged in sexual activities were twice more knowledgeable about contraception. That is, positive attitudes towards premarital sex is associated with high contraceptive knowledge.

In accordance with the study findings, Aziken, Okonta and Ande (2003) reported from Nigeria that being sexually active, having ever used contraception and having been in a higher class in the university were significantly associated with more knowledge of contraception. In essence, a good knowledge of emergency contraception was associated with being sexually active; an evidence of positive attitude towards premarital sex.

The findings of the study go to support the presumption that knowledge of emergency contraceptives is associated with positive attitudes towards premarital sex and promiscuity however, a knowledge of contraceptive in general is not associated with positive attitudes towards premarital sex.

Hypothesis Four

On the objectives to examine the difference in attitude towards premarital sex of adolescents with knowledge of modern, natural and emergency contraceptives, the study hypothesized that there is no significant difference in attitude towards premarital sex of adolescents with knowledge of modern, natural and emergency contraceptives. Analysis of variance (ANOVA) was used to examine the difference in terms of their mean responses of attitude

toward premarital sex. The descriptive statistics, table 11 shows mean responses of adolescents with higher knowledge of modern, natural and emergency contraceptive attitude toward premarital sex. Results show differences among the average responses of attitude towards premarital sex of adolescents.

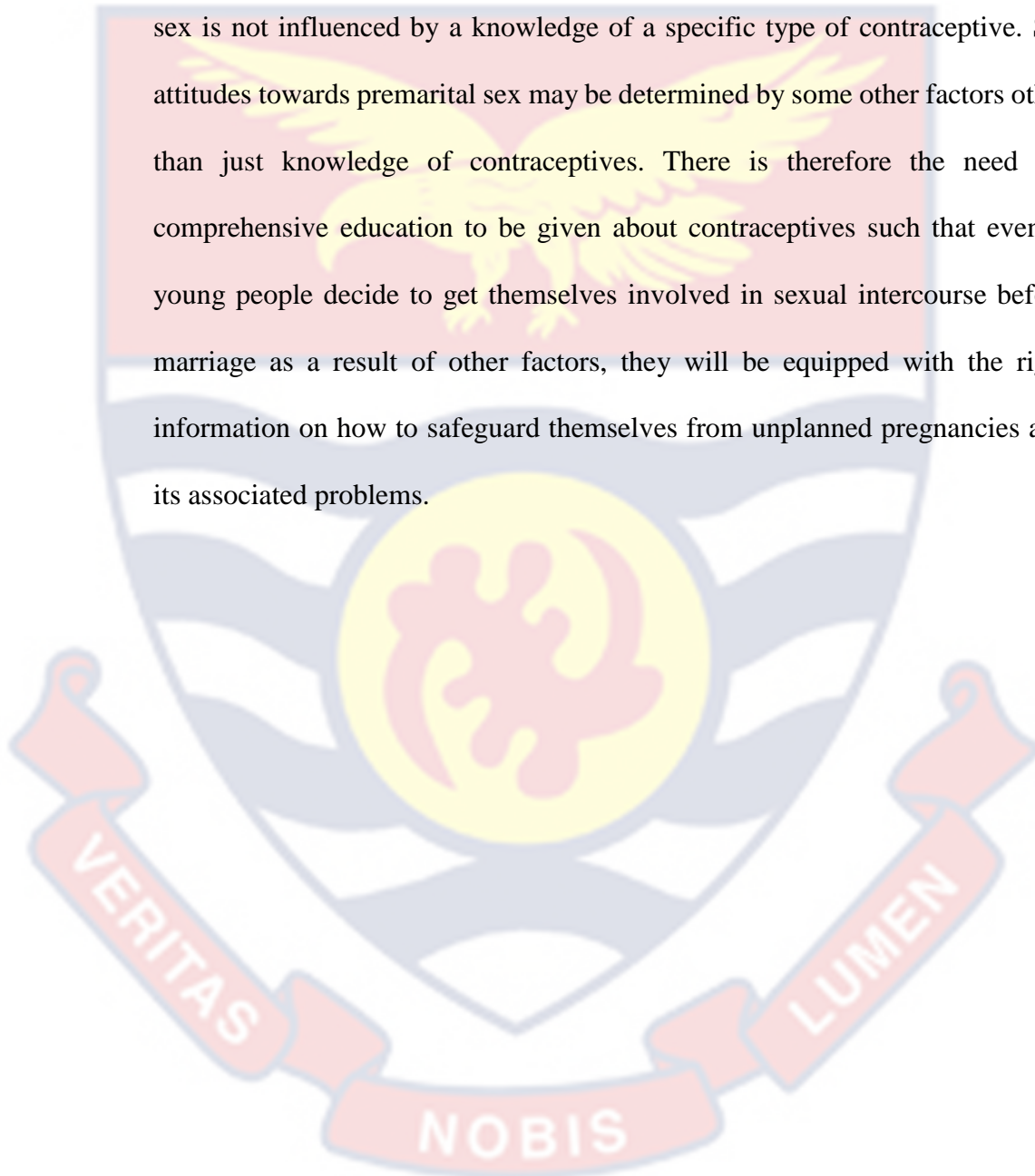
Adolescents with higher knowledge of modern contraceptives recorded lower mean than those with higher knowledge of natural and emergency contraceptive.

The F-statistic and Welch-stat p-values shown in table 13 and 14 are greater than 0.05 indicating lack of significant difference among the means. The study failed to reject the null hypothesis that there is no difference in the means of adolescent attitude towards premarital sex in terms of their knowledge of modern, natural and emergency contraceptive and conclude that the means are equal. That is, irrespective of the contraceptive type respondents had much knowledge of, their attitudes were the same (negative). The qualitative data gathered to explain this finding revealed that although knowledge of contraception was high, attitudes towards premarital sex were influenced by other factors such as religious beliefs and not necessarily a knowledge of contraception.

This finding is supported by Nsubuga, Sekandi, Sempeera and Makumbi, (2016), who reported from their survey conducted at Makerere University in Uganda that although female undergraduate students had a good knowledge of modern, natural and emergency contraceptives, premarital sexual attitudes were the same (positive) among study respondents which was evidenced by the high level of premarital sexual activities. Similarly, Grindlay, Dako-Gyeke, Ngo, Eva, Gobah, Reiger, Chandrasekaran & Blanchard, (2018)

found in their study in Ghana that knowledge of natural, emergency and modern contraceptives was universal although premarital sexual activities, an evidence of positive attitudes towards premarital sex was high.

From the discussion, it can be realized that attitudes towards premarital sex is not influenced by a knowledge of a specific type of contraceptive. So, attitudes towards premarital sex may be determined by some other factors other than just knowledge of contraceptives. There is therefore the need for comprehensive education to be given about contraceptives such that even if young people decide to get themselves involved in sexual intercourse before marriage as a result of other factors, they will be equipped with the right information on how to safeguard themselves from unplanned pregnancies and its associated problems.



CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

This chapter presents a summary of the study, concludes the study based on the findings and makes policy recommendations to improve knowledge on contraceptives and attitudes towards premarital sex among adolescents.

Summary of the Study

The study focused on the relationship between knowledge of contraception and attitudes towards premarital sex among adolescents in senior high schools in Asante Akim North District. Specifically, the study sought to test four hypotheses namely:

Research Hypotheses

1. H_0 : There is no statistically significant relationship between adolescents' knowledge of modern contraceptives and their attitudes towards premarital sex.
 H_a : There is a statistically significant relationship between adolescents' knowledge of modern contraceptives and their attitudes towards premarital sex.
2. H_0 : There is no statistically significant relationship between adolescents' knowledge of natural contraceptives and their attitudes towards premarital sex.
 H_a : There is a statistically significant relationship between adolescents' knowledge of natural contraceptives and their attitudes towards premarital sex.

3. H₀: There is no statistically significant relationship between adolescents' knowledge of emergency contraceptives and their attitudes towards premarital sex.

H_a: There is a statistically significant relationship between adolescents' knowledge of emergency contraceptives and their attitudes towards premarital sex.

4. H₀: There is no statistically significant difference in the attitudes of adolescents with knowledge of modern, natural and emergency contraceptives.

H_a: There is a statistically significant difference in the attitudes of adolescents with knowledge of modern, natural and emergency contraceptives.

The study employed a mixed method approach specifically the explanatory sequential mixed method. This design was adopted because the study wanted to find relationships between variables and find out reasons for those relationships. Questionnaire and focus group discussion were used to collect data from the respondents. Purposive, stratified and simple random sampling techniques were used in sampling 361 students from Ananekrom S.H.S and Pataban S.H.S in the Asante Akim North District. The research hypotheses were analyzed with both descriptive and inferential statistics, and thematic analysis was used to analyze the qualitative data.

Summary of Findings

The study found that adolescents have a good knowledge of modern, natural and emergency contraceptives and information on contraceptives was acquired from classroom lessons (the was the commonest source), media,

friends and peers, internet, parents, health providers and PPAG clinic. Also, it was found that attitudes towards premarital sex was generally negative.

Further, a significant negative relationship was found to exist between knowledge of modern contraceptives and attitudes towards premarital sex. That is, a high level of modern contraceptive knowledge was associated with negative attitudes towards premarital sexual activities.

Again, it was found that there exists no significant relationship between knowledge of natural contraceptives and attitudes towards sexual intercourse before marriage. That is, knowledge of natural contraceptives is not associated with attitudes towards sex before marriage.

Also, it was found that a significant positive relationship exists between knowledge of emergency contraceptives and attitudes towards sexual intercourse before marriage. This implies that a high level of emergency contraceptive knowledge is associated with positive attitudes towards sexual activities before marriage.

Finally, no significant difference was found to exist between the attitudes of adolescents with high knowledge of modern, natural and emergency contraceptives. That is, no difference exists in the attitudes toward premarital sex based on knowledge of modern, natural and emergency contraceptives.

Conclusions

This study makes the following key conclusions based on the findings. Firstly, it is concluded that the most important source from which students in Asante Akim North district gain information on contraceptives is from the school or classroom lessons. This makes the school, which is also a trusted

source of information as it is known to provide accurate information, an important institution in the provision of contraceptive education.

Additionally, it is concluded that students in Asante Akim North district has a good knowledge of modern, natural and emergency contraceptives. This goes to indicate that education on contraception is good in Asante Akim North. It was also concluded that students in senior high schools in Asante Akim North have negative attitudes towards sex before marriage.

Further it can be concluded from the study that a good contraceptive knowledge is not related to positive attitudes towards premarital sex. Although a high knowledge of emergency contraceptive was related with favourable disposition towards premarital sex, a high knowledge of contraceptive in general is not associated with positive dispositions towards sexual intercourse before marriage. However, a good knowledge of contraceptive is associated with negative attitudes towards sexual intercourse before marriage. From the study, it is recommended that contraceptive education should be encouraged to equip young people with the right information on how to prevent pregnancy as it is not the reason for positive attitudes towards sexual intercourse before marriage and therefore does not promote promiscuity as feared.

Implications for Counselling

From the information gathered from the study, the following counselling implications can be raised:

Firstly, it was realized that students get most of their information on contraceptives from school and this source is trusted by them. Counselling services, especially orientation programmes should give attention to education on premarital sex, its effects on the adolescents and information about

contraceptives. Counsellors should organize programmes and if possible, invite resource persons to educate students on contraceptives and where it can be acquired. Again, counsellors should work with teachers whose subject areas covers topics on reproductive health so students will be given the right information in these lessons.

The study also gave an idea of the existence of premarital sexual activities among students in the district. School counsellors, in an empathetic and welcoming environment should engage students who are noted for engaging in premarital sexual activities to find out the reasons for that behavior. With this information, counsellors will be able to provide the right counselling for behavior change or assist them in preventing unwanted pregnancies.

The study further revealed a high level of boy -girl relationship among students. It is important that counsellors identify, guide and counsel such students on the need to desist from such relationships. Also, students should also be guided on the best practices in their relationships and friendships with the opposite sex.

Recommendations for Policy and Practice

Based on the findings of the study, the following recommendations are made:

1. Guidance and Counseling Coordinators and Teachers should be empowered by the Ghana Education Service and Ministry of Ghana to educate the youths on contraceptives, with emphasis on modern contraceptives, emergency contraceptives and natural contraceptives.

However, the education should not only focus on their positive effect of preventing pregnancy but knowledge of contraceptives in their entirety,

that is who should use contraceptives, how it is used, when to use, why they are used and their side effects.

2. The Ministry of Education (MoE), through the Curriculum Research and Development Division (CRDD) should include in the senior high school syllabus issues bothering on contraceptives education. That is, topics that teaches adolescent reproductive health should not end at issues on chastity but also include issues on how to prevent pregnancy through the usage of contraceptives.
3. The Guidance and Counseling Coordinators in various senior high schools should collaborate with teachers and students, and through peer and group counselling, educate adolescents in senior high schools on premarital sex. Adolescents should be made aware of the negative consequence of premarital sex on the health, psychological and academic progress of adolescents.
4. Parents should be sensitized through Parents Teachers Association (PTA) meetings to desist from encouraging their wards to engage in premarital sex. Parents who do such things when reported should be arrested for encouraging defilement. Adolescents should be sensitized to see the need to report parents and relatives who push them into premarital sex against their will.

Suggestions for Future Studies

This study investigated the knowledge on contraception and attitudes towards premarital sex among adolescents in senior high schools in Asante Akim North District. The study makes very important revelation about the sources of information on contraceptives, knowledge on modern contraceptive

methods, knowledge on natural contraceptive methods, knowledge on emergency contraceptives and attitudes towards premarital sex. However, not every adolescent student was involved since the study focused on only form three students in two selected senior high schools in Asante Akim North District.

This study, therefore, recommends that future researches can consider the following to better enhance the understanding of knowledge on contraception and attitudes towards premarital sex among adolescents in senior high schools.

1. Future researches should consider students from all levels (form 1, form 2 and form 3).
2. The role of parental characteristics should be considered to better appreciate the attitudes of adolescents towards premarital sex.
3. Future researchers should consider the geographical area by including inter districts, municipal and metropolis or regional.
4. Future researchers should consider other factors that influence attitudes towards premarital sex.

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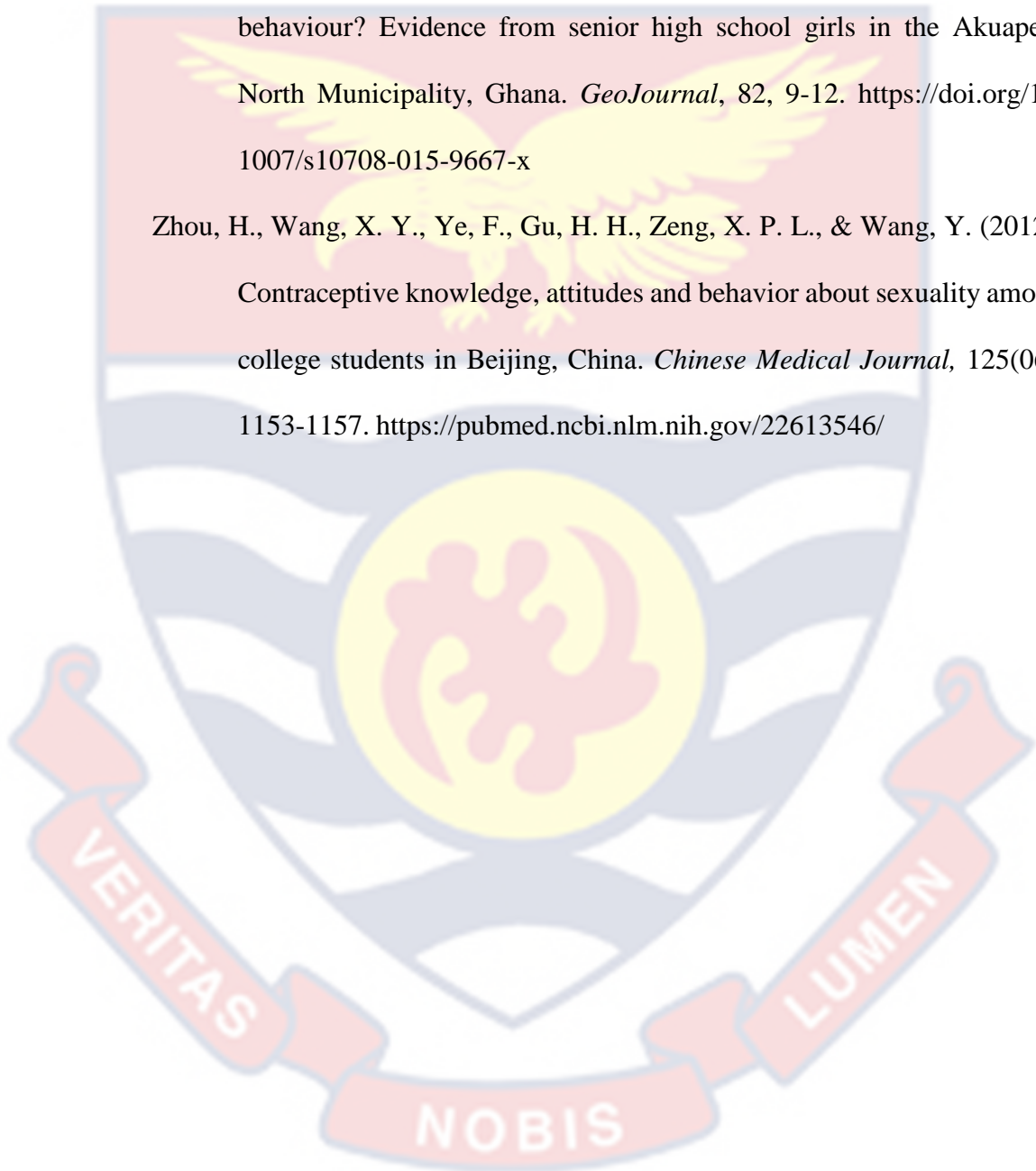
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APPENDICES**APPENDIX A**

UNIVERSITY OF CAPE COAST

COLLEGE OF DISTANCE EDUCATION

DEPARTMENT OF EDUCATION

QUESTIONNAIRE FOR STUDENTS

Dear participants I am a second year MPhil Guidance and Counselling student carrying out a study on knowledge of contraceptives and its effect on attitudes towards premarital sex among adolescents in senior high schools in Asante Akim North District. The purpose is to assess adolescents' level of knowledge on contraceptives and how it relates to their attitudes towards premarital sex. I recognize that you have a busy schedule but I believe you can spare sometime to contribute to the study. Your truthful responses will be greatly appreciated and be assured that your responses will be completely kept confidential. Please you are not required to write your name anywhere on the questionnaire. Thank you

A. SOCIODEMOGRAPHIC CHARACTERISTICS

Please tick (✓) in the appropriate space provided and supply answers where required.

1. Gender [] female [] male
2. Age Years
3. Form
4. Religious affiliation [] Christianity [] Islam
[] Traditional
5. Are you in a relationship? [] Yes [] No

6. Have you been sexually active before? [] Yes [] No

B. KNOWLEDGE ON MODERN CONTRACEPTIVE METHODS

Please tick the appropriate response in the table below as it applies to you. (SD)

Stands for strongly disagree, (D) stands for disagree, (A) Stands for agree and

(SA) stands for strongly agree

		SD	D	A	SA
7	Contraceptive use does not provide 100% protection from pregnancy				
8	Pregnancy prevention can be done by both for male and female				
9	Contraceptive use is beneficial in helping women and couples time and space their pregnancies				
10	Some contraceptives types can be taken orally				
11	Some contraceptives are in the form of injections				
12	Intrauterine devices are types of contraceptives				
13	Male condom is a type of contraceptive				
14	Cervical cap is a form of contraception.				
15	Female condom is a type of contraceptive				
16	Spermicides is a form of contraception				
17	Implant is a form contraceptive				
18	Sterilization is a type of contraceptive				
19	Condoms are not reusable				
20	Sterilization is a permanent method of contraceptive				
21	Injectable contraceptive is repeated once every 1,2 and 3 months				
22	Intrauterine device is inserted in the womb				
23	Implant is inserted into the woman's arm for a period of 3 to 5 years to prevent pregnancy				
24	Weight gain is a side effect of contraceptive				
25	Irregular menstruation is an effect of contraceptive				

C. KNOWLEDGE ON NATURAL CONTRCEPTIVE METHODS

Please tick the appropriate response in the table below as it applies to you. (SD)

Stands for strongly disagree, (D) stands for disagree, (A) Stands for agree and (SA) stands for strongly agree.

		SD	D	A	SA
26	Natural family planning is a method of contraception				
27	Pregnancy can be prevented without the use of medications and devices				
28	Certain times of the menstrual calendar are safe for sex to prevent pregnancy				
29	A woman's menstrual cycle can be used to prevent pregnancy.				
30	The withdrawal method is a type of contraceptive				
31	Exclusive breastfeeding for six months can prevent pregnancy during that period				

D. KNOWLEDGE OF EMERGENCY CONTRACEPTIVE

Please tick the appropriate response in the table below as it applies to you. (SD)

Stands for strongly disagree, (D) stands for disagree, (A) Stands for agree and (SA) stands for strongly agree

		SD	D	A	SA
32	Emergency contraceptives can be used to prevent pregnancy after unprotected sex				
33	When emergency pill is taken within 5 days of unprotected sex, it can prevent pregnancy				
34	The sooner an emergency pill is taken, the more effective it will be in preventing pregnancy				
35	Emergency pill cannot be used to replace a regular contraceptive				
36	Emergency pill can make one experience her period earlier or later than usual				
37	Copper intrauterine device can serve as an emergency contraceptive				

E. ATTITUDES TOWARDS PREMARITAL SEX

Please indicate how the following statements apply to you by ticking the appropriate box.

		True of me	Not true of me
38	I like engaging in premarital sex		
39	I like to have sexual relations before marriage		
40	I enjoy breast fondling		
41	I enjoy sex play		
42	I desire oral-genital sex		
43	I like using pornographic materials		
44	I like having intimate kissing		
45	I cherish casual kissing		
46	I cherish petting without affection before marriage		
47	I cherish sex without affection before marriage		
48	I enjoy petting with little affection before marriage		
49	I enjoy sex with little affection before marriage		
50	I have no problem with premarital sexual intercourse		
51	I will not scold my girl/boy for having sexual intercourse with many boys/girls.		
52	I enjoy sexual intercourse before marriage because it is good.		
53	I don't see anything wrong sleeping with married men/women for money.		
54	I think it not wrong to sleep with men/women for money if I need money.		


Thank you for your time.

APPENDIX B

KNOWLEDGE OF CONTRACEPTIVES AND ATTITUDES

TOWARDS PREMARITAL SEX

INTERVIEW GUIDE FOR STUDENTS

- 
- The background of the page features a large, faint watermark of the University of Cape Coast crest. The crest is a shield with a red top section containing a yellow eagle with wings spread. Below the eagle are horizontal stripes of blue and white. In the center of the shield is a yellow circle with a red stylized figure. At the bottom of the shield is a red banner with the Latin motto 'VERITAS LUMEN NOBIS' in white capital letters.
1. Have you heard of contraceptives before?
 2. What is contraceptive used for?
 3. What method of contraception do you know of?
 4. How are these methods used?
 5. What is premarital sex?
 6. Do you think it is appropriate for young people to engage in premarital sex?
 7. What is the reason for your answer to question 6 above?
 8. Do you think your knowledge of contraceptives makes you more likely to engage in sex with your boy/girlfriend?

Thank you for your assistance


APPENDIX C

ETHICAL CLEARANCE

UNIVERSITY OF CAPE COAST

INSTITUTIONAL REVIEW BOARD SECRETARIAT

TEL: 0558093143 / 0508878309
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OUR REF: UCC/IRB/A/2016/1052
YOUR REF:
OMB NO: 0990-0279
IORG #: IORG0009096



12TH AUGUST, 2021

Ms. Martha Kwakyewaa
Department of Guidance and Counselling
University of Cape Coast

Dear Ms. Kwakyewaa,

ETHICAL CLEARANCE – ID (UCCIRB/CoDE/2021/02)


The University of Cape Coast Institutional Review Board (UCCIRB) has granted Provisional Approval for the implementation of your research titled “**Contraceptive Knowledge and Attitude towards Premarital Sex among Adolescents in Senior High Schools in Asante Akim North District: Implications for Counselling.**” This approval is valid from 12th August, 2021 to 11th August, 2022. You may apply for a renewal subject to submission of all the required documents that will be prescribed by the UCCIRB.

Please note that any modification to the project must be submitted to the UCCIRB for review and approval before its implementation. You are required to submit periodic review of the protocol to the Board and a final full review to the UCCIRB on completion of the research. The UCCIRB may observe or cause to be observed procedures and records of the research during and after implementation.

You are also required to report all serious adverse events related to this study to the UCCIRB within seven days verbally and fourteen days in writing.

Always quote the protocol identification number in all future correspondence with us in relation to this protocol.

Yours faithfully,


Samuel Asiedu Owusu, PhD
UCCIRB Administrator

ADMINISTRATOR
INSTITUTIONAL REVIEW BOARD
UNIVERSITY OF CAPE COAST

APPENDIX D

LETTER OF INTRODUCTION

