UNIVERSITY FOR DEVELOPMENT STUDIES, TAMALE.

KNOWLEDGE, ATTITUDE AND PRACTICES OF SENIOR HIGH SCHOOL STUDENTS ON SEXUAL AND REPRODUCTIVE HEALTH IN THE SAGNARIGU MUNICIPALITY

BY:

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DECLARATION

Student: I hear by declare that this thesis is the result of my own original work and that no part of it has been presented for another degree in this university or elsewhere.

Candidate's Signature:..... Date: 09/01/2024

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Supervisor: I hereby declare that the preparation and presentation of the thesis was supervised in accordance with the guidelines on supervision of thesis laid down by the University for Development Studies.

Supervisor's Signature:..... Date: 09/01/2024

Dr. Abukari Salifu

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DEDICATION

I dedicate this work to my mother, Rukaya Alhassan.

ABSTRACT

The achievement of global development objectives like education, poverty reduction, and gender equality depends on adolescent sexual and reproductive health (SRH). Since teenagers constitute around 25% of the world's population, concentrating on them is both necessary and unavoidable. Adolescent sexual and reproductive health is responsible for a sizable share of the global burden of sexual ill health. In order to ensure that teenagers live healthy lifestyles; it has become essential that they have easy access to information regarding SRH. During the transition from adolescence to adulthood, adolescents in both developed and underdeveloped countries encounter comparable SRH issues. This study aims to investigate the Sexual and Reproductive Health of Adolescents in Senior High Schools within Sagnarigu municipality. The study was cross sectional that employed mixed methods. The data was collected in all the 6 senior high schools in municipality. A Stratified Random sample of 380 adolescents completed the questionnaire, two focus group discussions among adolescents and 12 interviews of teachers were conducted. Quantitative data was analyzed using SPSS version 24.0 whilst data from the focus group discussions and interviews were analyzed manually. Among these adolescents, 49.8% were men and 50.2% were females. Fifty three percent of respondents were unaware that a female can become pregnant after unprotected sex with a boy if the boy withdraws before ejaculation. More than half of the adolescents felt scared when experiencing their first menses. Forty nine percent of the respondents ever had sex. Qualitative data showed that the use of contemporary contraceptives and sexual and reproductive knowledge in general was hindered by religious and cultural beliefs and also concerns about their harmful side effects. Respondents have indicated unhappiness with the existing sexuality education they get in school. Also, it was discovered that schools lacked the instructional and learning tools required to offer sex education. There are well-organized policies that must be put into practice that exist on paper. To get their support for such a program, parents must be trained or educated on how to mentor or instruct their adolescents in sexual health education. To address problems related to sexual and reproductive health, senior high school campuses should establish clinics that are youth -friendly. Religious and traditional leaders ought to be enlisted and given the necessary training so they can contribute significantly to the spread of SRH knowledge.

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LIST OF ABBREVIATIONS AND ACRONYMS

AIDS	Acquired immuno-deficiency syndrome
FGD	Focus Group Discussion
GSS	Ghana Statistical Service
HIV	Human Immune deficiency virus
IAWG	Inter-Agency Working Group
ICPD	International Conference on Population and Development
IPPF	International Planned Parenthood Federation
MICS	Multiple Indicator Cluster Survey
NORSAAC	Northern Sector Action on Awareness Center
PPAG	Planned Parenthood Association of Ghana
SPEEK	Supporting Peers and Encouraging Empowerment
SPSS	Statistical Package for Social Sciences
SRH	Sexual and Reproductive Health
STI	Sexually Transmitted Infections
UNAIDS	Joint United Nations Programme on HIV/AIDS
UNESCO	United Nations Educational, Scientific and Cultural Policy
UNFPA	United Nations Population Fund
UNICEF	United Nations Children's Fund
WHO	World Health Organization

CHAPTER ONE

INTRODUCTION

1.0 BACKGROUND TO THE STUDY

The achievement of global development objectives like education, poverty reduction, and gender equality depends on adolescent sexual and reproductive health (ASRH). Since teenagers constitute around 25% of the world's population, a concentrate on them is both necessary and unavoidable. There were 7.5 billion individuals on the earth in 2017, and 1.2 billion of those were teenagers (Kenada & Dupuis, 2017). 16 million teenage females give birth annually on average, making up 11% of all births worldwide, with the majority of these births taking place in low- and middle-income countries (UNICEF, 2010). Adolescent sexual and reproductive health is responsible for a sizable share of the global burden of sexual ill health (ASRH). Foreign organizations are increasingly concentrating on modernizing and providing programmatic support for ASRH, despite the fact that it has historically been neglected (Morris & Rushwan, 2015).

Concerns about Sexual and Reproductive Health (SRH) have captured the interest of academics during the past twenty years. This is owing to the fact that problems with reproductive health have been identified as one of the major factors in adolescent sickness and mortality around the globe. The physical and hormonal changes that bring about sexual maturity and the capacity for reproduction occur during adolescence. Adolescents start to become interested in themselves and the changes they are going through at this age.

According to World Bank report, Sub-Saharan Africa has the highest adolescent birth rate in the world, with 100 births per 1,000 adolescent mothers (World Bank, 2016).In developing countries, 20,000 girls under the age of 18 give birth every day, resulting in 7.3 million births yearly (United Nations Population Fund [UNFPA], 2018). In 2015, the rate of adolescent births per 1,000 women

aged 15 to 19 was 21% in the US, 9% in Canada, 7% in China, 56% in Ethiopia, 56% in Costa Rica, 62% in Mexico, and 10% in Qatar (World Bank [WB],2016). According to the demographic and health survey conducted in Ghana in 2014, 14% of women between the ages of 15 and 19 had started having children, with the rate of adolescent pregnancy being higher in rural areas (17%) than in urban areas (12%) (Ghana Statistical Service [GSS], 2015, pp. 6-9 to 70).

In order to ensure that teenagers live healthy lifestyles, it has become essential that they have easy access to information regarding SRH. During the transition from adolescence to adulthood, adolescents in both developed and underdeveloped countries encounter comparable SRH issues. These issues vary from preterm birth, access to contraceptive knowledge, and abortion to sexually transmitted diseases (STIs) (Health et al., 2018).

The prevention of unintended pregnancies, unsafe births, and sexually transmitted infections (STIs) is a major democratic priority in Ghana, and among other countries. The distribution of contraceptives and an increase in sexual awareness are still necessary to achieve Millennium Development Goals (MDG) targets five and six of the World Health Organization (WHO) (MDGs). To address the issues with teenagers' sexual health, Ghana's successive governments have put in place a number of programs. Among these are the creation of the Ghana AIDS Commission Act (Act 613), the National HIV/AIDS and Sexually Transmitted Infections Policy (2001), and the Adolescent Reproductive Health Policy (Act 485).

In addition, the Ghana Education Services (GES), in partnership with the Ghana Health Services (GHS), attempted a number of youth-friendly programs, such as the School Health Program, to satisfy the needs (SHEP). The SHEP specified that schools shape the health of adolescents holistically by teaching about reproductive health and encouraging students to acquire adequate

information on the subject. Yet, SRH issues have been entrenched and treated as sub-topics in courses like Biology, Management in Living, Integrated Science, and Social Studies that they are not taught thoroughly (Adjaloo, 2009). To prevent sexually transmitted illnesses, unsafe abortions, unwanted pregnancies, and births, sexual and reproductive health is essential.

The main objectives of preventative measures are strategies to treat and prevent STIs, affordable contraception, and access to sexual and reproductive health information. Reproductive rights, such as the freedom to (a) control one's fertility, (b) practice self-defense, and (c) avoid STIs, pertain to both adults and teenagers (WHO, 2018). Teenagers' involvement in risky sexual behaviors has also been connected to sexual and reproductive health (SRH). The stressors connected to the passage from adolescent to adulthood are also lessened by SRH (Kapinga & Hyera, 2015). Also, it aids females in effectively regulating puberty and aids adolescents in understanding their genital organs (Fentahun, Assefa, Alemseged, & Ambawl, 2012).

Furthermore, social norms frequently inhibit adolescents from expressing their sexuality openly and without concern for rejection. Cultural norms limit a woman's freedom of movement and sexual expression in many civilizations. Sexual and reproductive health issues like contraceptives uses and sex education are still frowned upon in many countries. Teenagers' access to appropriate reproductive and sexual health information, counseling, and services is so restricted, especially at the school level. According to reports, the majority adolescents in South and Southeast Asia are ignorant about matters relating to their bodies, sexuality, and reproductive health. (Abdul Rahman et al., 2011) Sexual and reproductive health education is frequently claimed to be inadequate in Sub-Saharan Africa, where it is estimated that one-fourth of teenagers have had sexual experience.

Adolescents may safeguard themselves and their partners from pregnancy and sexually transmitted diseases if they are informed on how to prevent adolescent pregnancy, STIs, and the difficulties of a promiscuous lifestyle. (STDs) (Shiferaw, Getahum & Asres, 2014).Teenagers who get sexual and reproductive health education (SRHE) are better able to notice the changes connected to their current developmental stage and maintain excellent personal cleanliness, which reduces the likelihood that they may become sick from germs(Kapinga & Hyera, 2015).

Also, some researchers have stressed the need of exposing adolescents to SRH-related subjects (Kapinga & Hyera, 2015). Teenagers are given the information, abilities, and resources they need to make wise decisions about their SRH through adolescent SRH education (Morris & Rushwan 2015) Teenagers' involvement in dangerous sexual behaviors has also been connected to lack of SRHE (sexual and reproductive health education) (Pokharel, Kulczycki & Shakya, 2006).The pressures related to the passage from adolescent to adulthood are also lessened by SRHE (Kapinga & Hyera, 2015). Also, it aids females in effectively regulating puberty and aids adolescents in understanding their genital organs (Fentahun, Assefa, Alemseged, & Ambawl, 2012).

Despite the importance of SRHE, teenagers, especially in developing countries like Ghana, are not effectively informed about SRH concerns (Baku, 2014). The efforts of national and international organizations to advance SRH in Ghana have been unsuccessful. These failures have been attributed to teachers' and other stakeholders' negative perceptions of SRHE (Esere, 2008). In light of this setting, the goal of this study was to look at SRH of teenagers in Senior High schools. The goal of the study was to identify SRH information sources and improvement strategies among teenagers as well as their knowledge, attitudes, and practices.

1.1 Problem statement

An estimated 32 million teenage girls between the ages of 15 and 19 wanted to delay having children as of 2019. Regrettably, 14 million girls, or close to half of them, did not use a modern method of contraception despite the fact that they required one. Due to barriers to accessing contraception that regularly face teenagers (such as provider prejudice and a narrow range of permitted methods), there are more adolescent pregnancies and a higher chance of significant problems when giving delivery. The Guttmacher Institute calculates that if organizations were able to meet the unmet demand for modern contraception among teenagers aged 15 to 19, the number of unintended pregnancies would decline by 6.2 million annually, preventing 2.1 million unintended births, 3.3 million abortions, and 17,000 maternal deaths (Guttmacher Institute, 2016). Teenage pregnancies and sexually transmitted illnesses have increased during the early 2000s (Gumanga & Kwame-Aryee, 2012). Unexpected pregnancies among young people frequently lead to dropping out of school, especially among young women (Adu-Gyamfi's, 2014). According to Adu- Gyamfi in Upper Denkyira on pregnant teenagers, 96.25 percent of respondents had to drop out of school as a result of their pregnancies. The majority of unwanted births among high school dropouts, according to the report, were brought on by a lack of knowledge and access to sexual and reproductive health care.

Adolescents and young adults still have difficulties learning the required information, despite evidence to the contrary. SRH has been shown to benefit from increased access to SRH knowledge and comprehensive sex education. Teenagers typically have difficulty receiving comprehensive sexual education, which includes information on their gender and rights as well as age-appropriate, factual information about sexuality and reproduction. (IAWG, 2020)

Myths and false information regarding SRH and sexuality knowledge that either encourage or improve sexual behavior have made it difficult for adolescents and young people to obtain SRH

communications. Teenagers' parents and other trusted adults, such as instructors and educators, are unable to discuss the changes occurring in their bodies with them or direct them to more resources due to taboos, discomfort, and fear. Millions of young girls are under pressure to get married or have immoral relationships, which raises their risk of unwanted pregnancy, unsafe abortions, STDs, and dangerous delivery. Among the 27% of women in the least developed countries who gave birth before the age of 18, more than 12 million were teenagers(IAWG, 2020). Teenagers between the ages of 10 and 19 make up roughly 43.2% of the population in Ghana's Northern region had 22.5% of the country's total adolescent population. According to the study, teenage life includes significant and formative events like the first marriage, first sexual encounter, and fatherhood (PHC, 2020).

Adolescents' physical and emotional health depends on their knowledge about and access to reproductive health care. A prior study found that teenage girls were more likely to experience unplanned pregnancies, unsafe abortions with difficulties, and STDs because they were unaware of the risks associated with unprotected premarital sex (Kyilleh, 2018) According to the 2014 Ghana Demographic and Health Survey (GDHS), 15% of girls between the ages of 15 and 19 have started having children. Of these 15%, about 11% have delivered live children and 4% loss their babies at the time of the survey (GDHS, 2022). Teenagers' health and education are negatively impacted by a lack of understanding about SRH issues. In Ghana, rural female dropout and truancy rates have increased as a result of most adolescent girls' failure to maintain normal menstruation timing and sanitation (Gumanga & Kwame-Aryee, 2012). According to the poll, 10% to 20% of girls skipped school as a result of inadequate menstrual management and other reproductive health difficulties (Vaughn, 2013).

According to the Ghana Health Service, around 500,000 teenagers have been pregnant in the last five years. It is indicated that 555,575 teenagers between the ages of 10 and 19 became pregnant between

2016 and 2020. In these five years, 54, 2131 teenagers between the ages of 15 and 19 and 13,444 adolescents between the ages of 10 and 14 both became pregnant. The report by Ghana Health also states that, 301 girls become pregnant every day, and 13 adolescent pregnancies occur every hour. In addition to the information released by the Ghana Health Service (GHS), the regional breakdown statistics for Northern Region between 2016 and 2020 was about 43,533 pregnancies (GHS, 2020).

For instance, data shows that an adolescent birth rate of 73 births per 1000 mothers in the Northern Region (MICS, 2011). Most SRH-related difficulties might be resolved if teenagers received effective and current reproductive health education (Kapinga & Hyera, 2015). Over the years, this sort of education in Ghana has not received much attention (Abaka, 2015).The existence and effectiveness of the adolescent sexual and reproductive Health Education Program are called into question, especially from the teachers' and students' views, due to the high rate of adolescent pregnancies as a result of young people's lack of knowledge and practices about their sexual and reproductive health.

1.2 Research Question

1.2.1 Main Research Question

What is the Sexual and Reproductive Health of Senior High School Students within the municipality of Sagnarigu?

1.2.2 Specific Research Question

1. What is the level of SRH knowledge among respondents?

2. What are the adolescents' attitudes towards SRH?

3. What are the practices of SRH among adolescents?

4. How do adolescents assess school- based SRH program?

5. How may the problems of SRH in the schools be improved?

1.3 Research objectives

1.3.1General objective

This study aims to investigate the state Sexual and Reproductive Health of Adolescents in Senior High Schools within the municipality of Sagnarigu.

1.3.2 Specific objectives

1. To examine the level of respondents' knowledge on SRH.
2. To determine respondents attitudes towards SRH.
3. To determine the practices of respondents regarding SRH.
4. To assess school-based sexual reproductive health programs for adolescents.
5. Identify SRH's problems and how they might be overcome to make SRH successful in schools

1.4 Significance of the study

The importance of adolescent sexual and reproductive health education is made clear by the inclusion of the school-based sexual health program in the curriculum of the Ghanaian educational system. The goal of this is to arm youth with the information, abilities, and morals they need to make responsible decisions about their sexual and reproductive health. Raising young people's understanding of sexual and reproductive health would help to reduce the prevalence of STIs like HIV.

The study's findings will help educate teachers on the fundamentals of sexual health education for teenagers, especially in West Africa and Ghana. For those involved in providing reproductive health care services, including NGOs and the Ghana Health Service, the study can act as a guide for developing youth-friendly sexual health initiatives. It is likely to concentrate on the perspectives and difficulties of adolescent sexual life.

1.5. Conceptual Framework

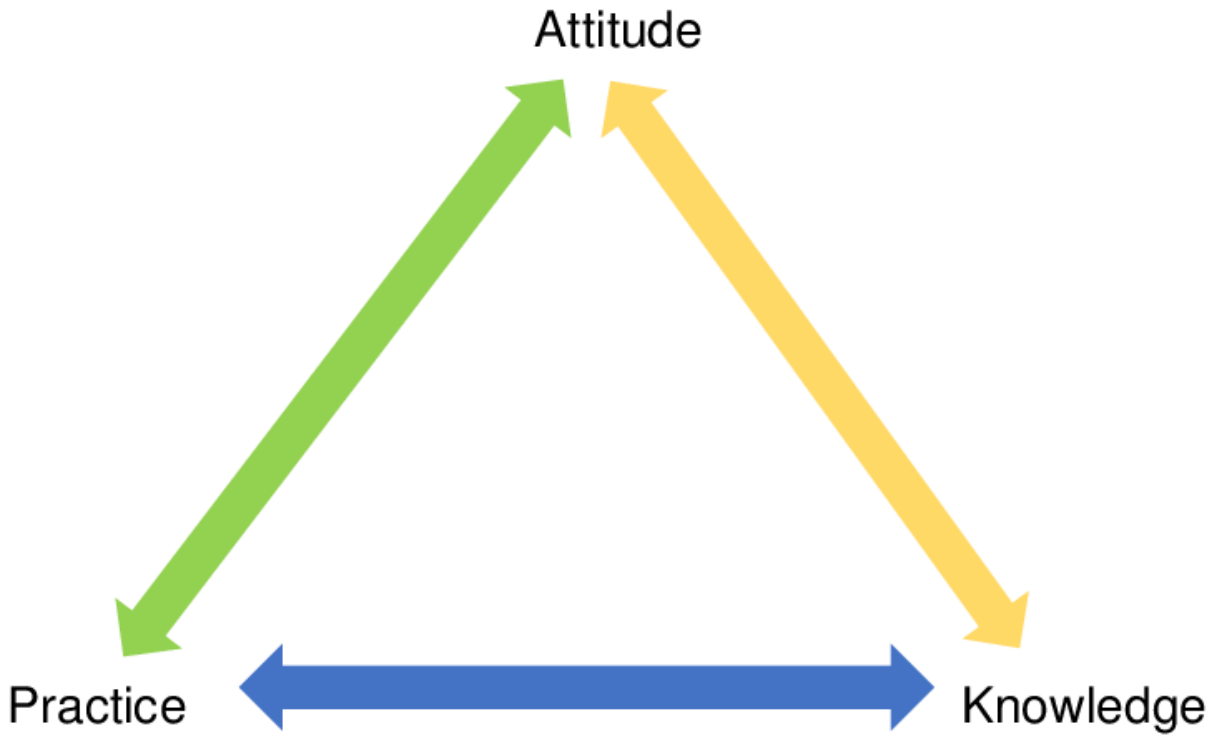
1.5.1 The Knowledge, Attitude and Practices (KAP) model

The Knowledge, Attitude and Practices (KAP) model is a quantitative survey method examining health behavior in a specific population (SPRING, 2011). Data collection from a KAP survey is conducted by interviewing using a predefined, standardized questionnaire (World Health Organization, 2008; Goutille, 2009). KAP data could be the groundwork for planning, implementing and evaluating the program, as it provides quantitative information while also uncovering misconceptions about particular health behaviors that exist in the specified population (SPRING, 2011; Goutille, 2009). In this light, the KAP approach may facilitate policy formation, program decisions, and action (World Health Organization, 2008). Additionally, the KAP approach may provide information regarding factors contributing to the knowledge of the studied population, and the reasons behind their attitudes and practice (World Health Organization, 2008). In the extended feature of a KAP survey, it can:

- Generate new information and assess knowledge, attitudes and practices of representative populations regarding their topics of interest and prove or disprove an assumption (SPRING, 2011; Goutille, 2009).
- Establish baseline information to use as a point of reference in future evaluation measuring program effectiveness, communication process and program impacts on behavioural changes (SPRING, 2011; World Health Organization, 2008).

- Give a richer understanding of what is commonly known and done (knowledge and awareness), attitudes and potential socio-cultural or socio-economic factors that might influence the present belief and practices (SPRING, 2011; Goutille, 2009; World Health Organization, 2008). On this account, the KAP approach can pinpoint the gaps in knowledge, patterns of behaviours and cultural beliefs that may reveal the resolutions to program needs (World Health Organization, 2008).
- provide recommendations for intervention plans and strategies that are suitable and culturally appropriate for a certain situation or group of people (SPRING, 2011);
- Facilitate in evaluating program activities and help to set priorities in decision-making (Goutille, 2009; World Health Organization, 2008).

Knowledge means detailed information gathered from reliable sources regarded as facts (Trevethan, 2017). Awareness is generally referred to as being knowledgeable and conscious about activities, objects and events (Gafoor, 2012). According to Trevethan (2017), these two words refer to general information and views that individuals hold and display, for instance, individuals' knowledge and awareness of health. In some manuscripts, they may refer awareness as being similar to knowledge (Trevethan, 2017). An attitude is a state of evaluating an object within the spectrum of positive or negative feelings toward something or someone (Lavrakas, 2008). The meaning of the term practice can differ depending on the context. In this thesis, the term is used to refer to the way of doing something habitually (Collins Dictionary, 2021).



(Bano e-tal 2013)

1.5.2 Bronfenbrenner (1979) Theory

Bronfenbrenner (1979) describes the association between an individual and his/her environment in his systematic ecological theory. He further argues that with an individual's development, their interaction also grows with the environment and becomes multifarious. Thereby, with the change in the environment, a transition of the individual's behavior also occurs. Each individual has different needs; therefore, specific attention should be provided to understand and facilitate these needs to adjust to a new environment. The concept of environmental influence is divided up into various realms based upon their proximity or remoteness. Bronfenbrenner (1979) splits them into four different systems that influence individual behavior (as shown in Fig. 2), namely: micro, meso, exo, and macrosystems:

(1) Microsystems. The microsystem involves the experiences and behaviors of the individuals in a setting where they come into direct contact. An example of microsystem influence would be the student's relationship with those whom they have direct interactions with, i.e., their family, peers, and teachers.

(2) Mesosystems. The mesosystem consists of the interconnections of two or more systems in which a developing person actively participates. In the case, they have direct interactions with academic heads, neighborhood peer groups, or teachers.

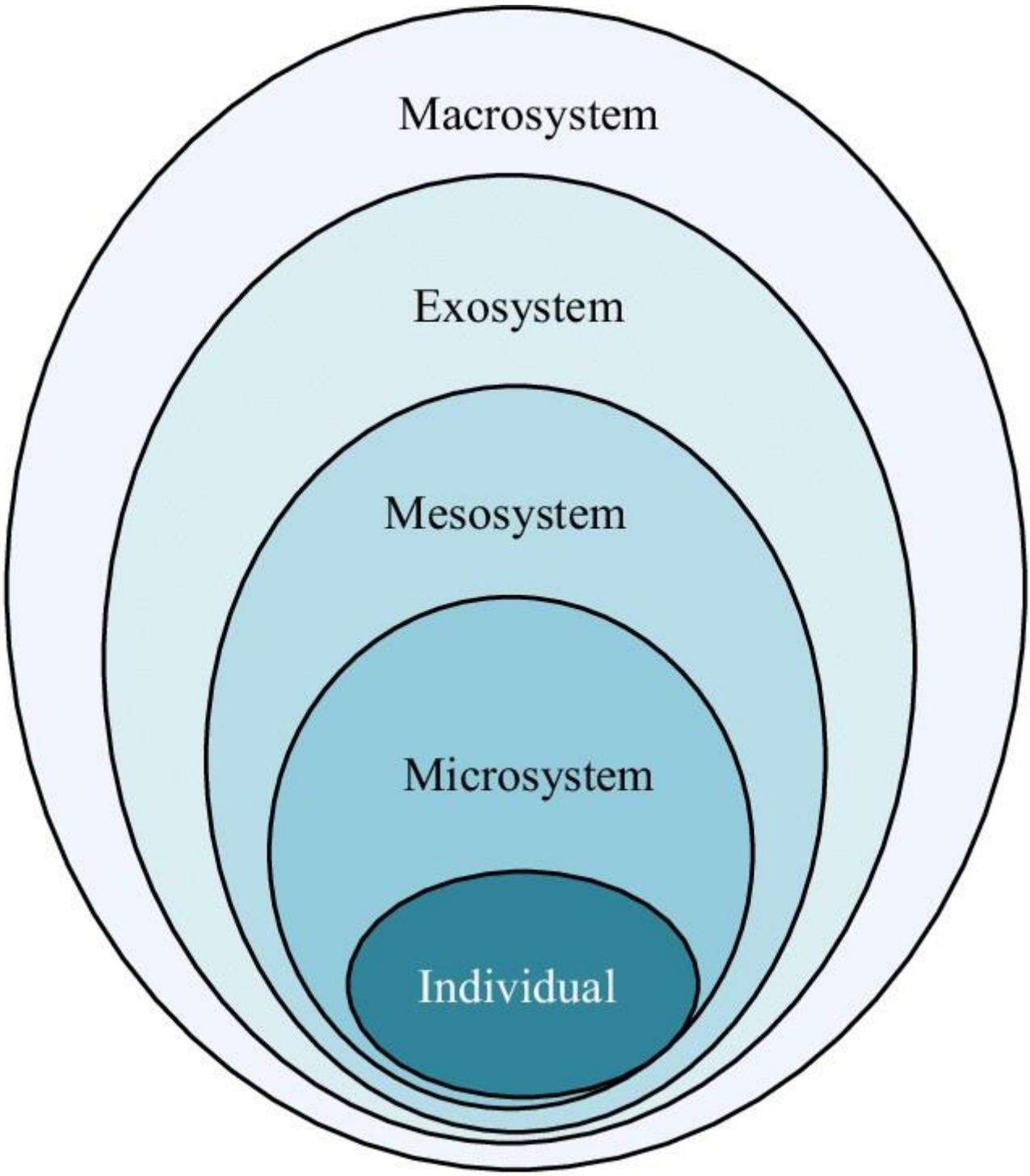
(3) Exosystems. The exosystem involves an interaction with a setting where an individual is not directly involved, such as teachers' working relations. Although these activities are completely unrelated to the students, they may have some impact on them.

(4) Macrosystems Lastly, the macrosystem involves all the components mentioned above, but also includes norms and values in a culture or subculture that an individual encounters. Based on that culture, an individual's family holds certain beliefs regarding community or religion.

This model recognizes the importance of diverse arrays of factors that represent a web of causality including personality traits, parental monitoring and support, peers, media, cultural and societal norms, influence young people's sexual behavior. Given this web of causality, any effort to effect changes in young peoples' sexual behavior like school-based sexual and reproductive health education, would have to address both the proximal and distal environmental factors that interact to influence young people's decision making process (Maton, 2000 cited from Di Clemente, et al., 2007).

Interactions within several social spheres such as the family, peers, school, definitely have an influence on shaping a young person's sexual attitude. The use of a systematic ecological approach provides a broader perspective for critically looking at numerous leverage points of long-term behavior change that school based sexual and reproductive health education seeks to achieve. For the purpose of this study therefore, the systematic ecological model becomes important as a guide in my analysis of data.This is against the background that young people are exposed to diverse sources of influence transecting different levels of causation. To adequately prevent and reduce the likelihood of adopting sexual risk behaviors, intervention programs should be designed to address these myriad levels of causation as described by Bronfenbrenner (Di Clemente et al., 2007) Applying a systematic ecological approach to young peoples' sexual behavior and attitudes is consistent with the growing tendency of health promotion programs to be based on expansive theoretical models that greatly exceed constructs that comprise the individual level (Di Clemente, et al. 2002 Di Clemente et al., 2007).

In essence, the distal elements influence the proximal elements, which mutually influence each other as well as the young person thereby making the victim or the benefactor of these larger influences. To provide holistic information to young people therefore, sexual health education programs must adopt a complementary approach that addresses these proximal and distal spheres as well as the interactions that occurs among them. The conceptual framework as a tool promises to enable a critical look at, not only the influences within the social setting concerning attitudes and practices, but also how school-based sex education program helps young people to cope with these myriad influences on their knowledge, attitudes and practices. It is believed that sex education would inform the necessary knowledge, attitudes and behavior of young people about life situations so that adolescent who benefit from the program would show better understanding, attitudes and behavior patterns than those who do not benefit from the program.



(Bronfenbrenner, 1979)

1.6 Study Organization

The study is set up in accordance with the institution's standards. The study comprises a total of five chapters. The issue statement and importance of the research are highlighted in the opening chapter, which also outlines the study's setting. The second chapter reviews pertinent literature and offers a conceptual framework for the study. Chapter Three provides a description of methodology. The presentation and analysis of the findings are covered in the fourth chapter. The study's summary of findings, conclusion, and recommendations are provided in the last chapter.

CHAPTER TWO

LITERATURE REVIEW

2.0 Introduction

This chapter covers the literature on adolescent sexual and reproductive health in senior high schools. The first three particular objectives will serve as the basis for this. There includes a section on the knowledge, attitudes, and practices of adolescents regarding sexual health, adolescent sexuality, access to sexual health services, and adolescent sexual health education and its challenges.

2.1 Adolescent Sexuality

The transition from being a dependent child to an independent adult member of society, known as adolescence, begins with puberty. Adolescents acquire information and skills, start to grasp how to control their emotions and relationships, develop the personality traits and skills necessary to enjoy their adolescent years, and start to take on adult responsibilities during this time.

The UN defines adolescence as the time between the ages of 10 and 19, albeit this range differs among nations. Puberty often starts in the early adolescent years, but it can start earlier. It is crucial to note that because of a number of variables, the transition to adulthood is taking longer than it used to. Adolescents' physical, cognitive, behavioral, and psychosocial traits change during this era of transition between childhood and maturity. Adolescents go through this period of growing autonomy, identity, and self-esteem as well as increased independence from adults. Adolescence is a crucial period for establishing norms and behaviors, as well as for preventing health issues and boosting the resilience of the following generation (IAWG, 2020).

The journey from infancy to adulthood involves a lot of changes and learning opportunities. Puberty, which occurs at age 10 for girls and 12 for boys, marks the beginning of the transition and opens up a

window of opportunity where life pathways can be changed based on either positive or negative experiences. The brain circuits involved in processing emotions, risks, rewards, and social interactions are significantly reorganized as a result of the pubertal transition. These neuronal developmental changes do not take place in a vacuum; rather, biological changes do not dictate behavior. Instead, the hormonal changes increase a person's propensity to behave in a certain way, and the actual behavioral patterns that develop heavily depend on the specific social setting.

Furthermore, the formation of these behavioral habits, which starts during the adolescent developmental window, has the potential to have cascade effects and change longer-term health trajectories. Understanding the links between social, emotional, and learning processes in adolescent treatments gives insights into minimizing vulnerabilities for hard-to-change negative spirals and providing possibilities to create good spirals.

A period of social, emotional, physical, and cognitive development starts when puberty first manifests. Significant changes in learning also occur at this time. New understandings have been gained from research on the biological, cognitive, and behavioral changes that occur during adolescence. Adolescents can then use this to adjust to new elements of their identity, learn how to interact with others and with themselves, handle tricky social situations, and understand abstract ideas and potential outcomes. Adolescents now have the knowledge, abilities, and capacity to successfully make the transition from childhood to adulthood.

Since it is characterized by sensitivity to feelings of belonging and worth as well as a more extensive search for meaning and purpose, adolescence is a key time for learning and growth. When a teenager is exposed to a pleasurable learning environment, this learning may also promote healthy trajectories and identity development. It can also aid in defining the adolescent's objectives, ambitions, and

sources of inspiration, as well as their capacity for invention. At the start of puberty, the brain may become more receptive to experiential learning than to traditional instruction, allowing teenagers to explore their growing curiosity particularly in relation to social and emotionally charged circumstances. One of the distinctive discoveries made possible by recent scientific advancements is this one. It is crucial to move away from a didactic approach to health education, which tells teenagers how to change their behavior, and in favor of a discovery-learning method, which encourages teenagers to explore and find new levels of understanding for themselves (IAWG, 2020).

Sexuality is a natural component of being human. It reflects our unique personalities and encompasses our speech, attire, walking gait, etc. It is about relationships with others who are the same sex as you or the opposite sex (SELL, 2017, p. 51).

The adolescent stage is a time for discovery of one's sexuality and sexual life, as well as for curiosity and experimentation. Nonetheless, this is frequently characterized by risk-taking actions that have bad sexual consequences (Krugu, 2016).

Sexuality, which includes sex, gender identities and roles, sexual orientation, eroticism, pleasure, intimacy, and reproduction, is a basic component of being a person throughout life. We feel and express our sexuality via our thoughts, desires, fantasies, attitudes, beliefs, practices, actions, roles, and interpersonal interactions. While a person is still in their formative years, their sexual experiences, relationships, actions, beliefs, and attitudes are all referred to as their sexuality (WHO, 2006).

Even while everyone's sexual development starts early in life, it really comes into its own throughout the teenage years and the first few years of adulthood.

However, the biggest problem teen's today likely face has to do with sexual and reproductive health issues brought on by unsafe sexual practices. Adolescent sexual activity has increased in recent years and is quickly becoming a global public health concern. This has mostly been linked to changes in hormone release, the development of secondary sex organs, and the emotional, cognitive, and psychosocial development that occurs throughout adolescence.

2.2 Sexual Health Knowledge

Adolescent sexual health knowledge includes information about sexuality, concerns relating to sexual and reproductive health care, and services related to sexual and reproductive health care. It might be argued that knowledge of SRH serves as protection against sexually risky behavior and the consequences that follow.

From September to November 2019, a cross-sectional study in the provinces of Zhejiang, Henan, and Yunnan examined 5965 undergraduates, aged 15 to 24, from nine universities. 158 (2.6% of the sample) self-identified as homosexual, 287 (4.8%) as bisexual, and 324 (5.4%) as having no idea of their sexual orientation. The average score on a scale of 1 to 12 for sexual knowledge was 6.16 2.54. In terms of attitudes and practices related to sexuality, female students are noticeably more conservative. Teenagers in China engage in risky activities as a result of their lack of sexual education (Lyu et al., 2020).

Additionally, a study was carried out among hearing-impaired adults and adolescents in 2010 by the National Resource Centre for Inclusive Education (NaRCIE) of Belize in collaboration with the United Nations Population Fund (UNFPA) to ascertain their knowledge, attitudes, and practices regarding sexual and reproductive health as well as HIV/AIDS in the nation.

The study revealed a knowledge gap among these adolescents regarding STIs, HIV/AIDS, early sexual debut, and coerced sex among both sexes. Also, it was noted that respondents' risky sexual activity was influenced by their drug and alcohol usage. About 80% of the 72 people who were interviewed for their knowledge of sexual and reproductive health were unaware of any of the STIs they were asked about, and 62.5% were unaware of how HIV is contracted.

Over 70% of the respondents really believed that HIV could be communicated via mosquito bites, through hugs, or even by sharing a plate with an infected individual. More than half of the respondents were unaware of how to get preventive measures and services for sexual and reproductive health (Ysaguirre, 2010).

In addition, the majority of the teenage girls knew very little about menarche. Girls in Saudi Arabia were found to have a severe lack of information about SRH, which significantly influenced their negative experiences as children and adults. Teenage girls' mental anguish was frequently brought on by their lack of information about menstruation, and menarche was linked to unpleasant memories and negative feelings.

Women's physical and psychological problems were associated with a lack of information about sexual interactions and ingrained anti-sex prejudice. Women preferred the internet for their SRH information because they rarely acquired it from their parents or teachers (Alomair et al., 2021)

Four health centers (2 rural, 2 urban) in Delhi participated in a semi-qualitative study. Sixty-four individuals participated in focus group discussions (FGDs) about various SRH topics. Although it was shown that people had good understanding about HIV/AIDS, they had low knowledge of other STIs. Participants from remote areas exhibited inadequate understanding and a negative attitude regarding SRH and condom use. The most frequent SRH information sources among participants in

rural and urban settings, respectively, were peer groups and mass media. Adolescents are exposed to poor SRH outcomes due to inadequate SRH knowledge, perceptions, and access to non-formal, inaccurate information sources (Meena et al., 2015).

According to a study conducted in Ethiopia, some teenagers believe that adolescent girls cannot become pregnant after just one act of sex. Just 44% of the female respondents between the ages of 15 and 19 were aware that adolescents may still become pregnant if she cleansed herself after sex, and 35% said they were doubtful (Abajobir et al., 2014).

These false beliefs result in the non-use of contraceptives and inadequate STI protection and therapy. Two thirds of female students and more than 60% of male students, according to Kathmandu, comprehended that it was possible to get a STI during a single sexual encounter, and more than half of students knew when in the menstrual cycle pregnancy was most likely to happen. One-time sexual activity may result in pregnancy, according to one-third of the participants. Men demonstrated poorer understanding of all aspects of sex and reproductive health than women, with the exception of preventing pregnancy (Mattebo et al., 2015). The need to improve sexual and reproductive health education is justified by lack of knowledge of key concepts in these fields (Abdul Rahman et al., 2011) Teenagers are better able to make decisions about their sexual life when they have knowledge about sexual health issues, which lowers their risk of unintended pregnancy, abortion, STIs, and HIV/AIDS (WHO, 2006).

Only 28% of females and 21% of males in this age group knew exactly how to avoid pregnancy, knew when a woman's cycle is, and were familiar with at least one current method of contraception. Also, relatively few young people are aware of how to properly use the male condom, which is the most popular form of protection (Awusabo-Asare et al, 2006).

In three Ghanaian towns, including Tamale, a study on the sexual health experiences of unmarried teenagers indicated that 98% of the samples of urban youth were aware of the existence and spread of STDs, including HIV/AIDS and gonorrhea. Only a few handfuls understood the importance of reliable contraception. This might be connected to the high rate of unwanted pregnancies, unsafe abortions, and maternal fatalities (Eliason et al., 2014). Few young people are aware of other modern methods of contraception, such as IUD, diaphragm, and traditional methods, therefore knowledge of contraceptives might be characterized as being restricted to the male condom. Yidana et al. (2015) reported that 74.8% of respondents had knowledge of the male condom compared to 3.3% of respondents who had knowledge of tubal ligation in their study on the sociocultural factors of contraceptive usage among teenagers in Northern Ghana.

Although the majority (52%) of junior high school students in Ghana's Northern Region believed that HIV/STIs constituted a concern, a sizable 37% were unclear or ignorant that they may get infected with HIV/STIs, according to a study performed by Savanna Signatures in 2014. Twenty percent of the participants believed that unprotected intercourse could not spread STIs. In another research conducted by Alwyn et al.., (2001), it was shown that 80% of teenagers were not aware that vaginal discharge is a common symptom of a STI infection in women. The majority of teenagers had more information of HIV/AIDS than other STIs, according to this conclusion, which is in line with an earlier finding. Also, 60% of people were not aware that certain STIs might be present but not present symptoms.

Rondini and Krugu , (2009) looked at 219 adolescent Senior High School students in Bolgatanga, in Ghana's Upper East Region, aged 15 to 24. They were interested in how they knew about reproductive health and how they felt about it. The researchers obtained information on their attitudes about adolescents, relationships between men and women, family planning, STIs,

HIV/AIDS, and vulnerability to sexual assault. The study found that 74.7% of male students and 82.1% of female students had not used any family planning techniques, which they feared exposed them to sexual infections and unwanted births. Just 20% of teenage pupils had a solid understanding of how HIV/AIDS was spread. It was discovered that there was a sizable disparity between the knowledge that the adolescent students had and the practices that they were engaged in, leading them to argue that the students' general knowledge and fear of STIs, HIV/AIDS, and unintended pregnancies did not automatically result in protective behavior among them. Some of the teenagers chose self-induced abortions or services from unprofessional providers because they lacked awareness about family planning and the use of contraceptives (Dako-Gyeke & Ntewusu, 2012).

Kyilleh et al. (2018) demonstrated how some adolescents in the Western Gonja District of northern Ghana put their lives in danger due to ignorance of and misperceptions about reproductive health services. When compared to adolescents who were in school, both those who were out of school and those who were in school showed little to no knowledge about sexual and reproductive health.

Neither teenagers nor parents fully comprehend adolescent SRH difficulties. Yet, respondents concurred that it was important to warn teenagers about SRH and recognized that in the absence of reliable sources, adolescents would rely on other, possibly unreliable sources of information (Termini LaChance & Adda-Balinia, 2017).

2.3 Adolescent Sexual Practices

Teenagers are growing more sexually active all over the world; most often, they are unprotected and unavoidably stay at danger of catching STDs like the human immunodeficiency virus (HIV) and acquired immunodeficiency syndrome (AIDS). Adolescents struggle to understand the importance of

unsafe and/or casual intercourse, drug use, and other activities that raise the risk of HIV transmission since they are still in the learning period of life. Continuous peer pressure makes the issue worse. Their lack of sex education, including knowledge about STDs and how to prevent them, raises their level of vulnerability (Lin et al., 2020).

Studies conducted in India have shown that adolescent girls are just as likely to engage in premarital sex in small towns and rural areas as they are in metropolitan cities. 23.3% of adolescent girls in Ajmer, Rajasthan, participated actively in premarital sexual activities (Goyal, 2005). Teenagers are known to engage in a huge number of hazardous and careless first encounters, which increases their chance of developing STDs and could potentially lead to an unintended pregnancy. Some college students admitted to having several sexual partners (Kumar et al., 2017).

According to a UN estimate, India, one of the high-risk nations, still has nearly four million adolescents who are HIV positive (Youth & HIV/AIDS, 2001). Regrettably, the majority of these victims are in the age range that is most productive. Due to widespread societal stigma and the potential for social discrimination, the percentage of individuals obtaining treatment is low (UNAIDS, 2019).

Using its Youth Risk Behavior Surveillance System, which conducts twice-yearly surveys of a nationally representative sample, the Centers for Disease Control and Prevention (CDC) tracks sexual activity among high school students. 40% of high school students had ever participated in sexual intercourse (defined as penile-vaginal penetration), 29% were presently sexually active, and 10% had done so with four or more partner's altogether, according to the most recent Youth Risk Behavior Survey (YRBS) from 2017.456,000 teens and young women under the age of 20 were

pregnant in 2017, the most recent year for which statistics are available. Of these pregnancies, 7400 include girls under the age of 14, while 448,000 included females between the ages of 15 and 19.

In the United States, the number of new STI infections increased by 31% between 2013 and 2017, with young people between the ages of 15 and 24 accounting for half of the 2.3 million new cases annually. This research set out to find out if young adult and adolescent patients really revealed sexual behavior to medical experts during a sexual history and to look into the relationship between disclosure and usage of the recommended services

Little is known about teenage sexual behavior, attitudes, and related issues in Saudi Arabia. A cross-sectional study with 453 male teenagers from Riyadh high schools was carried out utilizing a multistage sampling technique. Approximately 54.1% of the teenagers engaged in daily masturbation, 38% had sexual contact, and 67% had friends who had experienced sexual contact. The majority of teenagers (72.2%) thought men had sex before getting married, and just 11.5% of them talked to their parents about their sexual health. The results showed that male teenagers engaged in risky sexual conduct and had negative attitudes concerning sexual engagement (Alsubaie, 2019).

Teenagers who appeared between 2015 and 2019 for state-mandated physical exams at a youth crisis shelter in Bethlehem, Pennsylvania, were the subjects of an IRB-approved, retrospective cohort study. To define the population and ascertain the association between sexual activity and the use of contraceptives and factors such as age, gender identity, substance use, and a history of childhood trauma.

440 teenage patients' medical records were examined. Among those, 233 (53.7%) reported having intercourse, while 148 (or 65.2%) of the 227 sexually active teens said they used contraception.

There was a large difference in contraceptive use among young people who identified as male and female (YRBS, 2017).

In October 2005, interviewed 1171 Canadian adolescents (ages 14 to 17) and 1139 mothers of teenagers online. At a mean age of 15, 27% of teenagers were sexually active, on average, they had 2.5 partners throughout their lives, and they had been in their current relationship for further than 8 months. The last time that they had had sex, 76% had used a condom the most recent time they had sex. The percentage of youths who are sexually active at any age was overestimated by both teens and mothers. School, parents, friends, and doctors were the best places to get information. Sixty-nine percent of teenagers reported difficulty finding the information they were seeking for, and 62% said there were difficulties obtaining it. Teens were not aware of the risks associated with STDs. 75% of mothers cited their teenagers' friends as key sexual role models, and 50% felt that celebrities in the entertainment industry were on par with them. Yet, parents were seen as role models by 45% of children, significantly more than friends (32%) or famous people from the entertainment industry (15%). Although claiming to have good ties with their mothers, 38% of teenagers said they had never brought up the subject of sexuality. The majority of teenagers (94%) agreed that it was their responsibility to advise other teenagers about sexual health. (Frcpc et al., 2008)

According to reports from around the world, adolescents are starting to engage in sexual activity at younger ages (Rose et al., 2005). This age varies greatly between nations and is influenced by the social norms that are considered acceptable and may have a detrimental impact on a person's sexual activity. Although the median age of sexual debut in Ghana is stated to be 18.4 years for men and 20 years for women between the ages of 20 and 24 years, 11.8% of females in the 15–19 age group commenced sex at age 15, compared to 9.3% of boys in the same age group (GSS-DHS, 2015)

Early sexual activity is followed by a protracted premarital sexual engagement period, when higher-risk sexual orientations emerge and partner changes are frequent (Ogbada, 2013). Moreover, early sexual start has been linked to more casual relationships, more sexual partners, and a greater risk of contracting STIs (Pettifor et al., 2004)

In order to understand how having an affair before the age of 14 could affect a number of aspects of a teen's life by the time they are 18 years old, Kastbrom et al. (2015) conducted research. The research included 3,432 high school students from Sweden. The study's findings revealed that early sexual contact was linked to unsafe sex such as multiple partners, oral and anal sex, drug and/or alcohol abuse, smoking, oral and anal sex, as well as anti-social behaviors such as stealing, avoiding responsibility, telling lies, and exhibiting violent traits (Cavazos et al. 2010). Boys in the study were more likely than girls to have low self-esteem, poor mental health, a feeble sense of coherence, and physical abuse by the time they turned 18 years old.

Sexual conduct is significantly influenced by age and physical development. Teenagers are more likely to have sex as they get older. They also have a propensity to start having relationships early because they reach physical maturity and menarche at young ages. It has been shown that teenagers are exposed to both short- and long-term risk depending on when they have their first sexual experience, which has significant public health consequences. (Ogbada, 2013).

Through socialization and peer acceptance, adolescents often shape their identities and behavioral habits. A key normative predictor of the inclination to start sexual relations is how peers perceive sexual practices. A favorable attitude regarding sexual encounters and having one-night stands is associated with the perception of one's peers as sexually active and supportive of the practice (Potard et al., 2008).

One of the elements that are discussed and linked to risky sexual conduct that can easily result in teenage pregnancy and the acquisition of sexually transmitted illnesses among teenagers is early sexual debut, coital debut, or intercourse debut as some refer to it (O'Hara et al., 2012). Many variables affect an early sexual debut. O'Hara et al. (2012) found that early exposure of a child to sexual content in movies increased their likelihood of engaging in early sexual behavior as adults. It has been demonstrated that sexually explicit movie content altered a person's behavior by making them more prone to sensation-seeking during their teens (O'Hara et al., 2012).

2.2 million Teenagers between the ages of 10 and 19 are estimated to be HIV-positive in 2012, with 80% of them living in Sub-Saharan Africa. People between the ages of 15 and 24 made about 42% of all new HIV infections. Ghana is one nation in sub-Saharan Africa suffering from the terrible impacts of HIV/AIDS. Young persons aged 15 to 24 made up 28% of all new HIV infections in 2012, with a prevalence of 1.3%. (Ghana Aids Commission, 2014).

One of the dangerous sexual practices that adolescents engage in that has numerous negative effects on both them and others is having multiple sexual partners (Vasilenko & Lanza, 2014) Individuals all around the globe have this special practice of having several sexual relationships at the same time or in succession (Kelley et al, 2003). Several studies have shown that having many sexual partners increases a sexually active teen's risk of contracting STDs or infections including chlamydia, HIV/AIDS, and the human papillomavirus (HPV) infection that causes cervical cancer (Kalichmanet al, 2007)

Adolescents who engage in unprotected sex run the risk of contracting HIV because heterosexual sex is the main way that HIV spreads in Sub-Saharan Africa. Adolescents who engage in unprotected intercourse run the risk of unwanted pregnancy. Particularly for young women, HIV and unintended

pregnancies can have severe implications. Adolescent females who become pregnant unintentionally may have a variety of negative effects, including health issues, being forced to drop out of school, unsafe abortion, becoming a mother too soon, and losing access to social support if the pregnancy happens outside of a legal union (Kumi-Kyereme et al., 2007)

Risk-taking sexual behaviors have also become widespread among teenagers. They frequently have several sexual partners, engage in unprotected sexual activity, engage in early sexual activity, and have unsafe abortions (Ogbada, 2013). Adolescence is a typical period in a person's development when they are more curious, experimental, and open to exploring their sexuality and other life objectives. This stage of life is characterized by risk-taking activities. (Krugu, 2016)

Adolescent risk-taking activities frequently have a detrimental impact on this cohort's health and place a financial burden on families and governments because they force them to spend money on health care services that could have been utilized to advance development instead. Early sexual debut is a harmful practice that is commonly linked to forced sex, particularly among females (Kastbom et al., 2015).These females are also more expose to having several and, in most instance, multiple unprotected sexual encounters (Moore et al., 2007 cited from Krugu, 2016).

2.4 Contraception Usage

Teenagers in Ghana use contraception at a relatively low rate. Even while 96% of females between the ages of 15 and 19 have heard of at least one modern method, just 30% of sexually active girls now use any kind of contraception, and only 22% of those are utilizing a modern approach. In Northern Ghana, only 2 percent of adolescent girls who are sexually active use modern methods; in comparison, 51% of females in Brong Ahafo and 24% of girls in Greater Accra .Ninety-five percent of sexually active teenage girls who are not married wish to delay having children for at least two

years, yet despite having unmet requirements for family planning, 62% of them do not utilize a technique or do not want any (more) children. In Ghana, 14% of all teenage girls and males have started having kids (i.e., given birth to a live child or are pregnant right now), and 75% of those births happened inadvertently in the preceding five years. This percentage was much lower in the Northern area (16%) compared to Brong Ahafo (77%) and Greater Accra (72%). Teenagers seem to be more vulnerable to unwanted pregnancy and abortion, according to data. Less than 10% of older women's pregnancies resulted in abortion, compared to 16% of pregnancies among women under the age of 20(Ghana Maternal Health Survey, 2007).

High rates of adolescent pregnancies in Ghana and Sub-Saharan Africa indicate a high prevalence of hazardous sexual activities among youth, such as the non-use of contraception. (Krugu, 2016). A factor that affects teenagers' protected or unprotected sexual conduct, notably their condom use, is their lack of awareness regarding contraceptives, STIs, and pregnancy (van der Geutgen, 2017). In general, rates of contraceptive use among married and unmarried women aged 15 to 19 and 20 to 24 in sub-Saharan Africa are still quite low (UNFPA, 2012).

Studies show that teenagers in Ghana have a high level of knowledge about contraception. Male and female condoms are the most well-known birth control methods, with 90% of teens having heard of at least one modern technique (Kumi Kyeremanteng, 2006). Adolescents in the Kintampo district were overwhelmingly knowledgeable about modern contraceptives, with 87.7% of them demonstrating this awareness (Enuameh et al., 2015). The pill was the most well recognized form of contraception that many young people (58%) in the Northern Region could name (ACDEP, 2008).

The researchers found that perceptions of STI sensitivity, behavioral control toward condom use, and the injunctive standard for condom usage were the best indicators of teens' intentions to use condoms

in Ghana (Krugu et al., 2016). Having no sex experience, feeling uncomfortable carrying condoms, and not strongly believing that using condoms is always a good idea were all connected with intentions not to use condoms. The study also showed that adolescents have favorable attitudes toward condom use and are more likely to use them in areas where they perceive a higher risk of STIs and unwanted births.

There are several theories put up to explain why young people are not using contraception at high rates. These factors include low risk perception; a lack of information needed to make informed decisions, resistance from male partners, and perceived negative effects at the individual level (Yidana et al., 2015). The poor usage rates are a result of both the health systems' constrained capabilities and the delivery mechanisms for contraceptive services, particularly in developing nations.

Major obstacles to using contraceptives have been recognized as culture and religion. The culture and religion of a society determine what information is supplied on sexuality. In practically all Ghanaian communities, it is still taboo to discuss SRH-related topics with adolescents. This is supported by a conventional and religious philosophy that emphasizes abstinence as a key strategy for preventing unprotected sex and all of its negative effects (van de Geutgen et al., 2017). As a result, despite the fact that the majority of this cohort engages in sexual activity, these attitudes prevent adolescents from using contraceptives in any way (Lebese et al., 2013). Williamson et al. (2009) identified geographic barriers to health services, anxiety about a negative response from clinic personnel, and a lack of knowledge on how to use contraceptives as additional barriers to contraceptive use in a systematic review of qualitative studies on restrictions to contraceptive use among young women. According to the report, young girls are deterred from using contraception owing to worries about the bad consequences of different hormonal drugs, monthly abnormalities,

and reproductive difficulties. Contraception usage has increased in Southeast Asia; this is also true in Cambodia, Lao PDR, Myanmar, Thailand, and Vietnam. Contraception use among women of reproductive age increased gradually in all of the study's participating countries between 2012 and 2019, ranging from around 25% to 30% in Cambodia, 35% to 41% in Lao PDR, 27% to 32% in Myanmar, and 44% to 47% in Vietnam. (World Bank Group, 2020b). It should be noted that Thailand's 2019 modern contraceptive prevalence (mCPR) numbers are still unavailable. Notwithstanding this, the rate was substantially greater than in the other countries studied during the same time periods. (76.9% in 2012, 78.4% in 2016, and it is predicted to increase further in 2019). (The World Bank Group, 2020b)

Thai teenagers aged 15 to 19 who are married or dating report using contraceptives at the highest rate among the countries listed, making up more than two-thirds of the teenagers in this age group (National Statistical Office and UNICEF, 2016). In contrast, almost all married people or young adults in partnerships don't use any type of contraception in Cambodia (95.4%) and Myanmar (93.2%)(National Institute of Statistics and ICF, 2015). More than two-thirds of adolescents in the Lao DPR and Vietnam who are married or in a union do not use any method, compared to 61.6% of adolescents in Vietnam (Lao Statistical Bureau, 2018)(General Statistical Office, 2015 and UNICEF, 2015).

2.5 Adolescent Sexual Health Attitudes

Unsafe sexual practices might include using condoms infrequently, having several partners, and not using any kind of contraception. These behaviors could put individuals at risk for STIs including HIV/AIDS, early or unexpected pregnancy, which could result in unsafe abortions, early childbearing and sexual coercion (Baltag & Chandra-Mouli, 2014)

Given the detrimental health consequences of unsafe sexual practices on their future health and development, one would expect very favorable opinions toward their sexual health and well-being, but this is not the case for the vast majority of teenagers. Stone et al. (2012), said that attitudes are a reasonably persistent arrangement of beliefs surrounding an item or circumstance that predisposes one to respond in a particular way. When adolescents are considered in the context of this definition, it is implied that their decisions regarding issues pertaining to their sexual life are influenced by the beliefs they hold about their sexual health and well-being. Teenagers' attitudes and behaviors concerning condom possession and use, as well as their attitudes toward actual condom use, have an impact on whether or not they choose to have protected or unprotected sex. Many young people are prone to dangerous sexual practices such polyamory, unprotected sex, having sex with minors, and being in situations where they could be sexually assaulted. Adolescents are more likely to use substances, which can lead to unhealthy sexual activity. These actions have a negative impact on their long-term health, increasing their vulnerability to STIs like HIV/AIDS, dropping out of school owing to unwanted births, and human papillomavirus (HPV), which increases the risk of cervical cancer.

According to Glover et al. (2003), 62% of their respondents identified a barrier to condom use as being too bashful to buy one. Also, it was discovered that respondents believed carrying a condom was improper for women (78%) since they perceived it as a sign of promiscuity, especially for women. Similar findings, including condom use being linked to infidelity, condom use being condemned by religious authorities, and immorality being encouraged (Azeez, 2011).

Williamson et al., (2009) discovered in a systematic review of qualitative literature on barriers to young women using contraceptives that concerns about the actual and perceived side effects of hormonal contraceptive methods, particularly fear of infertility and menstrual disruption, were

significant contributors to young women not using these methods. Abdul-Rahman et al., (2011) found that the most significant disincentive to taking contraception was the negative repercussions of the techniques in their research analyzing the Trend of Contraceptive Use among Ghanaian Female Teenagers. In 2003 and 2008, respectively, 11% and 12% of the justifications for not intending to take contraceptives were claimed to be fertility-related. Additional concerns given were interference with normal bodily function and annoyance involved with employing various treatments.

Another reason why teens don't use family planning as much as they should is inadequate health education provided by service providers. It is sometimes challenging for service providers to spend enough time with teenagers to fully inform them about their options for contraception due to their hectic schedules. Because teens frequently lack knowledge about the adverse effects and how to handle them, this lack of information frequently leads to the discontinuation of contraceptive methods (Lebese, 2013).

There are numerous research in Africa that point to culture as a hindrance to sex education and service use. For instance, Browes, (2015) discovered that the cultural context has an impact on how conversations about sexuality are conducted and how sex education programs are perceived in Ethiopia. A more open-minded cultural approach to sex education in the nation is required, according to Mukoro, (2018), who also came to the conclusion that culture continues to fuel the debate over sex education in a pluralistic Nigeria. Cultural values ultimately affect how teenagers view sexual health treatments and their desire to use them.

Informed conversations on sexual and reproductive health issues, particularly those affecting adolescents, are severely hampered by cultural taboos (Lebese et al., 2013). Open discussions

regarding sexual health issues and, by extension, contraception are hindered by cultural standards pertaining to these matters.

According to Lebese, (2013), there is a subdued opposition to the use of contraceptives in rural areas. Premarital sex is forbidden in certain societies, open sexual conversation is frowned upon, and sex education's effects are feared. Sex education is alleged to promote promiscuity among young people. As a result, many individuals encounter stereotype and embarrassment when utilizing services or receiving sexual health information.

According to Roudsari et al., (2013) taboos around sexuality have an effect on how much sexual health education and services are used by youth in Iran. The United Nations Population Fund (2011) claims that among the socio-cultural factors that have a negative impact on the sexual health of female migrants in the nation are the unjust values of Vietnamese Confucian society, conventional values, norms, and beliefs, such as opinions of femininity, sex taboos, the value placed on female virginity, the fear of losing "face," and a belief in fate and karma (UNDP, 2011).

While the young women in one of these studies in Zimbabwe knew nothing about the signs and symptoms of STIs, the young men perceived having a STI as a sign of manhood and were extremely proud of it (Dehne et al., 2005). Boys felt that girls were the main STI carriers and that obtaining a STI was a normal part of growing up for guys in a different research carried out in Zambia (Dehne et al., 2005). If teens believe STIs are prevalent at that age or believe they have a low risk of developing them, they are less likely to wear condoms during sexual activity.

According to the WHO (2018), family planning improves people's rights to choose how many children to have and how far apart to space them, lowers maternal and infant mortality, particularly in underdeveloped nations, and offers dual protection against pregnancy and STIs. Notwithstanding

these advantages, people's choices to use or not use family planning have been associated with their concern about potential risks. Orach et al., (2015) found that the low usage of SRH services in the area is due to the belief that natural methods of contraception are more successful than modern ones and those services may result in health problems such irregular menstrual cycles and heavy bleeding. Similar findings were found in a study conducted in Chiapas, Mexico (Dansereau et al., (2017). The respondents were more aware of SHR services and willing to use them, but they were also perplexed and concerned about the long-term reproductive hazards associated with different hormonal family planning procedures, such as birth control pills and injections. Several of the people surveyed thought that using birth control tablets may make them permanently infertile, which is something they did not want. Apanga and Adam, (2015) observed that the usage of family planning services is mistakenly considered to injure women's wombs and is only suited for married a person, which lends credence to this.

Catholicism in particular has been identified as a hindrance to efficient SRH service utilization. According to this faith, using contraception, having an abortion, and engaging in sexual activity are all sinful (Orach et al., 2015). This supports the findings of Dansereau et al. (2017), who discovered that inhabitants of the most underprivileged areas of Chiapas, Mexico, are less likely to use SRH education and services due to religious objections. The Christian faith, for instance, admonishes believers to “Be fruitful and increase in number; fill the earth and subdue it. Control over all living things that move on land, including fish in the sea and birds in the sky. (Genesis 1:28), and the same is true of Islam.

2.6 Access to Sexual Health Services

Governments have pledged to enhance the SRH of adolescents since the International Conference on Population and Development Key Informant Interview held in Cairo in 1994 by giving them access

to thorough, current information, education, and youth-friendly medical treatment. Yet much of the world still fails to live up to these promises, particularly for unmarried adolescents (Siegrid Tautz, 2011).

There is evidence that challenges with culture, ignorance, stigma, and poor socioeconomic status limit teens' access to and use of reproductive health care. Young people are discouraged from seeking reproductive health services for a variety of reasons, such as misconceptions about family planning and a lack of sexual literacy (Regmi et al 2010; Nyoni, 2008; UNFPA, 2005). Many young people lack the information and resources necessary to protect themselves against HIV and other reproductive health (RH) issues, despite the fact that global awareness of these issues is growing (Population Reference Bureau, 2013)

Across the world, adolescents and young people are responsible for a lot of health problems, such as the 8.7 million abortions, 41% of new HIV infections, high rates of early marriage and STIs, and a sizable number of stillbirths and infant deaths (United Nations, 2012)

Also, studies have shown that very few young individuals use reproductive health services (Olaoye et al., 2015). This is brought on by certain traits that people by nature possess or by the surroundings in which they exist or are located. An immediate investigation of a number of factors influencing undergraduate students' understanding of and usage of reproductive health care is required due to this negative circumstance.

Many literary works have demonstrated that sexual activity is the primary method for the spread of STIs (Whitehead, et al, 2011). As a result, teens and people in their early 20s account for nearly two thirds of all STI cases globally (Dehne & Reidner, 2009).

According to research done over the past five years, Nigerian youths need access to effective sexual and reproductive health care, but they haven't been able to use the services that are available, like voluntary counseling and testing (VCT), because the providers are frequently prejudiced, unwelcoming, or undertrained to help sexually active youth (Njoroge, 2016).

The provision of reproductive health care to adolescents has historically received less attention, making them susceptible to issues including sexually transmitted infections (STIs), unwanted pregnancies, unsafe abortions, and other hazardous behaviors. It was determined that the average age of the participants was between 16 and 21 years old, and that the average age of the participants was between 16 and 21 years old. The study's findings showed that 283 respondents (72.9%) had a general understanding of reproductive health services, 57.7% had a moderate understanding of the services that were available to youths, 63.4% had never visited a health facility in their neighborhood for reproductive health services, and 87.8% of the participants had a low level of RHS utilization (Adebisi & Olanrewaju 2019)

The World Health Organization (WHO) estimates that 24.4 million women worldwide have abortions each year, with young people making up around 50% of abortion-related deaths in the African region (WHO, 2014). Non-abstinence, unprotected sexual contact, and failure of contraceptives have all contributed to unintended pregnancies (Ayodele, 2015).

According to WHO, (2011) young couples suffer 498 million cases of STIs each year as a result of unprotected sex. According to research conducted over the past five years, Nigerian youths require viable sexual and reproductive care (Ayodele, 2015), but they have been unable to access services like voluntary counseling and testing (VCT) because the staff members are frequently prejudiced, unwelcoming, or undertrained to assist sexually active youth (Njoroge, 2016)

With the National HIV/AIDS and STIs Policy (2001) and the Adolescent Reproductive Health Policy (2000) both from Ghana health services, youth-friendly policies are encouraged, and the Ghanaian government has made attempts to assist teens. Aninanya et al.., (2015) Evidence shows that Ghanaian teens continue to avoid SRH treatment despite estimates of STI prevalence and high birth rates among this population, 750,000 births yearly, primarily due to shame associated with premarital sex (12 & 13 Health intervention in northern Ghana). Despite the fact that more than half of female teens with prior single sexual experience and more than one-third of male teenagers with prior sexual activity do not use contraception, two out of every three young women and four out of five young men with STI symptoms do not seek treatment (Awusabo-Asare et al., 2008).

STI prevalence among Ghanaian adolescents is 1.9% and 5.5%, respectively, with 5.2% of female adolescents and 3.4% of male adolescents having STIs, according to surveys (Aninanya et al., 2015).

Teenagers refrain from using the current RH services for a number of reasons, including logistical difficulties, a lack of knowledge, and uncomfortable feelings. Although in scenarios where service programs may not seek to prevent adolescents from receiving services, operational regulations or the setting of facilities sometimes limit access to services. One continually picks up fresh knowledge regarding their sexuality and development when they are young. Friends are typically the ones who provide this information most frequently. Most people who rely on friends for knowledge on sexuality are either under- or even incorrectly educated about such topics. This situation restricts access and, as a result, usage of services, combined with poor understanding of the dangers of pregnancy and STIs as well as reproductive health options. (Senderowitz, 1999).

A life course perspective suggests that denying adolescents a reliable source of knowledge about puberty and sexual and reproductive health (SRH) might impede their development into adults and

have negative impacts on their welfare in their early years of adulthood and beyond (Morris & Rushwan, 2015)Teenagers in Ghana deal with a number of sexual and reproductive health issues that call for specific attention. Unfortunately, many youth still only have limited access to services for sexual and reproductive health. Teenagers' access to sexual and reproductive health care is influenced by both supply-side and demand-side variables (Sawyer et al., 2012) In order to find evidence-based best practices to solve the issue, a study looked into the legal, policy, and supply-side issues that affect access to adolescent sexual and reproductive health care in Ghana. The study was a literature and desk review, and Levesque et al.., 2019 access to health care paradigm was modified for the comprehensive analysis.

There are laws that follow international agreements, although some of them are unclear. The efficient application of the policies is also impacted by deeply ingrained religion and culture. Inadequate and inaccessible services, as well as unwelcoming and discriminating attitudes among health care providers, all have an impact on access. Infrequent government funding, a lack of medical supplies and equipment, and poor multi-sectorial cooperation further affect service supply and access (MPH/ICHD, 18, 2019).

Teenagers from low- and middle-income countries who immigrate or flee to high-income nations frequently underuse SRH services. The purpose of this review was to investigate how migrant adolescents perceive and use SRH services as well as the influences on those perceptions and experiences. It focuses on qualitative research that looks at how young migrants who live in high-income countries use SRH services. Five primary themes and 11 sub-themes were identified using thematic analysis. The results show that, despite the differences between the nations of origin and the host countries, there were many commonalities in how they perceived and used SRH services. Some young immigrants have spoken out about being treated unfairly by service providers. In nations

lacking universal healthcare coverage, the cost of care served as a barrier to the use of SRH services. The main obstacles to using SRH services were a lack of knowledge about them, privacy worries, and social stigmas associated with STIs and premarital sex (Maheen et al., 2021).

High-quality RH information and services are still difficult to get, especially for teens (I. Ojong, et al., 2014). RH concerns have emerged as a subject of growing concern in both industrialized and developing countries over the past few years since they have been viewed as a social problem (S. Akhter, et al., 2007).Many factors, including unsafe casual sex relationships, frequent sexual partners, ignorance of HIV/AIDS, sexual and reproductive health, lack of access to HIV services, sexual experimentation, early sexual debut, peer pressure, and other relevant issues, increase the risk of HIV infection in high school students(G. Barnabas, et al., 2014).

Teenage pregnancy rates are still high in Africa, where 430,000 adolescents contract HIV each year, 2.6 million adolescents live with HIV, and maternal mortality is one of the top causes of death for adolescent girls in this area (World Bank Group, 2014). Accessibility, availability, and quality are some of the issues with SRH services. Also, secondary school students reported that most HEIs lack adequate training for health professionals to address the needs of teenagers (X.LIU, et-al, 2012). Addressing SRH concerns, particularly HIV prevention, is significantly hampered by the lack of youth-friendly health services and counseling.

RH services offered by educational institutions in Ethiopia are usually constrained by restrictive rules, a lack of private counseling rooms, and limited linkages to resources outside the schools. Teenagers are particularly concerned about access to and use of reproductive health services (RHS) because they are particularly vulnerable to the hazards of unexpected pregnancy, childbirth, STIs like HIV, and unsafe abortion (Rondinelli, 2012).

Stigma and prejudice, a lack of information, the use of contraceptives, the capacity to make an informed decision regarding one's sexual behavior, and the requirement to learn safer sexual practices are all obstacles to adolescent-friendly sexual and reproductive health (SRH) services and information (Cortez et al., 2014). These limitations, which apply to groups like teenagers, are mostly based on institutional and cultural norms and expectations that keep sexual issues private and where information is readily accessible (Bacchus et. al., 2019).

No data was found on how much school-aged youth in Nekempt Town use the available reproductive health services, despite policy initiatives and strategic efforts to increase youth use of these services. The purpose of this study was to evaluate how frequently secondary school students in Nekemte town, Ethiopia, used sexual and reproductive health (SRH) services and the factors that were related to their use. Investigation was conducted in schools. The use of sexual and reproductive health care was assessed using a single question that asked respondents if they had used any of the components of these services in the previous year or not. A 96% response rate was achieved out of a total of 768 study subjects, with 739 participants completing all study requirements. The school teenagers identified inconvenience, loss of confidentiality, religion, culture, and parental disapproval as barriers to accessing SRH services. The high school students used few sexual and reproductive services overall (Binu et al., 2018).

2.7 Sexual and Reproductive Health Education

2.7.1 Adolescent Sexual and Reproductive Health in Africa

In the section above, we discussed the issue in relation to its larger context. According to UNESCO, which also has a specific emphasis on the region, HIV and AIDS continue to have a significant effect in Sub-Saharan Africa (SSA). In Africa, adolescent girls and young women between the ages of 15 and 24 continue to be especially susceptible to HIV. Gender inequality continues to negatively affect

the potential and success of girls in this area because of child marriage, lower rates of school completion (28% of girls attend in high school compared to 32% of boys), and cultural practices that define the responsibilities of girls and boys. Although while Sub-Saharan Africa has achieved some progress, there are still many difficult issues to solve (UNAIDS 2017).

Without a doubt, the program's operating environment affects the curriculum's concentration. Despite the national policy calling for the promotion of life skills needed by young people, Visser et al., (2005) found that in South Africa, CSE programs still primarily focus on HIV and AIDS awareness. Few national sexuality education programs in sub-Saharan Africa are found to match what are regarded as global standards, according to multiple studies (Herat J, et al., 2014) of the content and delivery of CSE programs. The material was age-appropriate and efficiently addressed communication skills, however the key informational issues that were left out were male/female condoms, contraception, and other SRH subjects including reproduction, STIs, abortion, where to receive services, male circumcision, and puberty. Sometimes, if at all, gender was taken into account.

Education and health ministers from 20 Eastern and Southern African (ESA) countries gathered in Cape Town in 2013 to develop a vision for young Africans. They made a commitment to make sure that the ESA area had access to comprehensive sexuality education of the highest caliber and to youth-friendly sexual and reproductive health care when they signed the "ESA Commitment" there. They commit to advancing HIV prevention, treatment, care, and support, as well as SRHR efforts in Eastern and Southern Africa while taking into account the sociocultural context of each country, for example, by ensuring that all adolescents and young people have access to high-quality, thorough, life-skills-based HIV and sexuality education (CSE) and youth-friendly sexual and reproductive health services. They also pledged to advancing gender equality and rights in the realms of education

and health care, realizing that more advantages may result from sex education that places a strong emphasis on rights and gender.

Setting up youth-friendly facilities and providing teenage sexual education in SSA still presents a number of foreseeably difficult obstacles. To ascertain the perspectives of service providers on adjusting sexual and reproductive health services, health professionals from two hospitals in Ghana were polled. Because of their insufficient understanding of adolescents' needs, they identified the unwelcoming attitudes of service providers as a significant challenge (Boamah-Kaali EA et al., 2018). The level of assistance and instruction is still impacted by societal disapproval of teen conversation about sex and related topics.

Students in Kenya were questioned by researchers from the Guttmacher Institute (Archibald T1, 2015) about the topics covered in their sex education, however they noted that the messages they heard had a fear-based and directive tone. Three-fourths of respondents said that their teachers made it a point to stress to them how important it is to wait until marriage to have sex and how dangerous it is for young people. Less than half of all students said they received a very strong message to refrain from having sex but to use condoms if they do. The article came to the conclusion that the existing practice in Kenya generally disregards skill-based learning and that the attitudes and values fostered by the program do not enable a positive perspective of sexuality and are instead largely conservative. The majority (71%) of instructors who reported teaching about abstinence also said that it was the best or the only way to prevent STIs and pregnancy. In Uganda's rural schools, comparable findings were made (Achora S, et al 2018). Further research has revealed that in order to prevent STIs and HIV and to keep going to class, students were given information that exclusively advocates abstinence. There has to be more investigation into how information given following the 2013 ESA Commitment is perceived.

2.7.2 Adolescent Sexual and Reproductive Health in Ghana

Prior to 1957, when Ghana gained its independence from British rule, missionaries were the main sources of western education, and religious and moral education was a crucial part of the educational system. Sex education was included in religion and moral education largely because Ghanaian society as a whole and the religiously inclined have always considered sex and sexuality as religious and moral concepts (Acquah, 2011). Under British administration, civic and hygiene education which covers human biology, personal cleanliness, and civic responsibilities was being provided. Luckily, Ghana was able to free itself from British rule in 1957. The pre-independence decades saw a lot of changes and initiatives implemented. The Ghanaian people can get family planning services because to the 1967 establishment of the Planned Parenthood Association of Ghana (PPAG). Throughout time, its field of practice has expanded to include a variety of sexual and reproductive health (SRH) services. Currently, in addition to offering fundamental family planning assistance, PPAG also offers mother and child health services, infertility management, and voluntary counseling and testing (VCT) for STIs like HIV/AIDS. It also offers other SRH services (for example, programmes for the management of erectile dysfunction).

Ghana is one of only three African nations with a population strategy having released Population is planning for National Development and Prosperity in 1969. When it comes to teaching students about adolescent sexual and reproductive health in the classroom throughout the 1970s, PPAG was a pioneer in teacher development programs. A new environmental/social studies curriculum included the family, sexual and reproductive health, reproduction, and sexuality, with a particular focus on abstinence.

A syllabus for life skills was developed in 1989 at the same time as a new educational framework was introduced. In 1992, the co-curricular School Health Education Program (SHEP) was

established. Although being developed in 1992 in cooperation with the Ministries of Education and Health, the School Health Education Program wasn't completely implemented until 2003. Its objective is to provide co-curricular health education to children in elementary and junior high schools, similar to the HIV Alert program. One of the follow-up actions following Ghana's approval of the United Nations Convention on the Rights of the Child and ratification of the World Declaration on Education for All was the founding of SHEP. In order to attain lifelong health, SHEP supports students in developing the information, skills, and attitudes necessary. Offering health services, maintaining safe and healthy learning environments, delivering efficient school health education, and leveraging schools as a springboard for enacting health policy are just a few of the specific goal (Asare et al.., 2017).

The government released the first Adolescent Reproductive Health Policy (ARHP) in 2000, which used a multi-sectorial strategy to address challenges related to adolescent reproductive health. (National Population Council, 2000)

The curriculum for elementary, junior high, and senior high schools should expressly contain a subject on reproductive health, which the policy specifically supported and assisted in doing. In 2013, the National HIV and AIDS, STI Policy recommended academic programs to include age-appropriate SRH education, which includes teachings on HIV/AIDS and other STIs. (AIDS Commission of Ghana, 2013) The School Health Education Program is carried out in schools by the Ministry of Education and the Ghana Education Service with assistance from the Ministry of Health. It was created with the help of many ministries and organizations.

The Ghanaian national curriculum does not clearly include sexual and reproductive health education as a distinct, tested topic. In its place, the Ghanaian educational system has developed a cross-

curricular strategy that incorporates a number of SRH-related concerns within a few school subjects. (World Bank, 2008)

In the fourth year of elementary school, which is the grade at which all courses, including those that involve SRH issues, are compulsory, fundamental SRH education topics were taught. The topics are condensed into two core, required courses (social studies and integrated science), as well as two electives, in senior high school (biology and management in living). The School Health Education Programme (SHEP) and the HIV Alert program are the two main extracurriculars that provide activities during or after school. These activities are provided in all Ghanaian schools, with a focus on students in elementary and junior high schools. But, they are also provided at senior high schools with assistance from the Ghana Health Service and the Ministry of Health. (GES, 2012; Ministry of Education, 2007)

In 2014, SHEP was expanded and given a new name Enhanced SHEP (E-SHEP), with the subtitle Life Skills Based School Health Education with cooperation from UNICEF, UNFPA, and the United Nations Educational, Social, and Cultural Organization (UNESCO) (GES, 2014). HIV Alert has been replaced with E-SHEP, a curriculum that focuses on four main areas: values and the development of psychosocial skills; HIV and AIDS; reproductive health; time management and goal-setting; and the duties of teachers, peer educators, and community members. Although a community-led component of E-SHEP uses trained community members, a peer-led component of the program teaches teens to instruct their peers in classrooms and communities. Some instructors are trained by an E-SHEP component directed by teachers to provide extracurricular counseling and training in sexual and reproductive health in schools (-Asare et al., 2017)For a complete list of subjects covered in senior high school social studies, integrated science, biology, and management courses (Ministry of Education, 2010)

The benefits of abstinence are stressed, along with the harmful and irresponsible behaviors of youth. Among the topics covered in the discussion are adolescence's definitions and explanations, sexual and reproductive health and rights, physical changes, gender relations, and the contributions of young people. Integrated science and biology concentrate on more fundamental themes, while social studies cover a broad range of topics. The most SRH subjects covered in the management in living curriculum are decision-making, family planning, STIs, and abortion (in the context of how illegal abortion impacts teenagers). According to Asare et al., (2017) this topic is offered in the home economics optional program, which is often only attended by a small number of students, mostly females, and is not required

Official judgments and actions involving SRH in Ghana have been impacted by, among other things, the Abuja and Maputo Declarations. Also, these agreements make a point of enhancing youth access to resources. The ARHP from 2000 was replaced by Ghana's Sexual and Reproductive Health Policy for Young People in 2015. National Population Council, (2017) "Have adolescents who are well informed about their sexual and reproductive health and rights, and who are healthy," is the policy's stated goal.

2.7.3 Impacts of School-Based Policy and Education on Sexual and Reproductive Health

The United Nations World Program of Action for Youth to the Year 2000 and Beyond, the 1989 Convention on the Rights of the Child, the 1994 International Conference on Population and Development (ICPD), and the 2001 U.N. General Assembly Special Session on HIV/AIDS all state that adolescents must have access to high-quality sexual and reproductive health services as well as education and counseling (Rosen et al., 2004). The governments of Ghana have also developed some policies to address teenagers' demands for sexual health given that they have ratified the majority of these international agreements. Among these regulations is the 1996 Adolescent Reproductive Health

Policy. The majority of young adolescents nearly 90% were enrolled in school, which was the justification for the introduction of sexual and reproductive education with the goal of empowering teenagers with the information and abilities to use the existing Sexual and Reproductive Health facilities wisely. (ARHP, 2000).

Programs that successfully reduce school dropout and enhance student engagement, academic achievement, and educational and professional goals are likely to either postpone sex, boost condom or contraceptive usage, or decrease pregnancy and childbirth, according to some convincing data. This is true despite the fact that there is little research on how schools affect teenage sexual health (Kirby, 2002). Several teenagers' health has been shown to improve thanks to comprehensive sexual health education. Studies have shown that SRH education programs are essential for reducing the issues of unwanted pregnancy, hazardous sexual behavior, and delaying first sexual contact. Kirby (2007) discovered that messages encouraging abstinence neither postpone the onset of sexual behavior nor have a substantial influence on the health of young adults when assessing the effects of sex and HIV programs on the health of teenagers around the world.

Additionally, he discovered that two-thirds of comprehensive sex education programs, no matter where they are implemented, have a positive impact on the sexual health of young people under the age of 25, including a delay in the first sexual encounter and an increase in the use of contraceptives. He therefore advocated for the widespread promotion of comprehensive sex education because there is scant evidence for the effectiveness of abstinence-only. Similar to this, Kohler et al., (2007) discovered that adolescents who participate in comprehensive sex education programs have a lower risk of getting pregnant than their peers who did not participate in any sex education initiatives.

Also, the main objective of sex education is to provide teenagers the information and morals they need to make informed decisions about their sexual and social interactions (UNESCO, 2009). According to Serenko, (2014), sex education helps adolescents resist sexual violence because it helps them understand how their bodies change biologically and prepares them to face the world without becoming prey to sexual predators. This is made possible by providing them with reliable information on their sexual and reproductive rights in order to educate and empower them. Teenagers with higher levels of education are also more likely to speak up when their sexual boundaries are crossed. Intimate partner violence (IPV) and sexual violence (SV) among adolescents were examined by Lundgren and Amin (2015), who came to the conclusion that school-based dating violence interventions (sex education programs) are successful in addressing such issues even though they are only used in high-income countries. They went on to say that community-based programs encourage young people to have gender-equitable attitudes. This is crucial since gender norms and inequality are among the major variables that affect people's health, particularly their sexual health.

Likewise, being in school can function as a deterrent to sexual risk-taking behavior, with higher school attachment levels being linked to lower sexual risk-taking. This is due to the fact that adolescent goals for the future and their desire to delay having children are undoubtedly influenced by the school's structure and curriculum.

Many different theories for how schools assist in minimizing risky sexual activities among in-school adolescents have been provided by educators and researchers looking into adolescents' sexual behavior. They recommend that:

1. Schools set up the schedules of learners and restrict the time that kids may spend alone or engaging in sexual activity.

2. Schools encourage interactions and participation with adults who oppose taking risks in any way. They often encourage a culture where taking chances is discouraged.
3. Schools can help adolescents make plans for their future education and job and increase their hope for the future. The desire to delay having children may increase as a result of this preparation, which is positively connected with the usage of contraceptives.
4. Schools can help kids improve their rejection and communication skills as well as their confidence in their own abilities. It is suggested that these skills may help students avoid unprotected sexual contact (Kirby, 2002).

According to Kirby et al.,(2002) there is a greater probability of lowering sexual risk behaviors among teenagers enrolled in schools when schools effectively execute a complete program on sexual health education prevention programmes where a substantial number of teenagers may be targeted. This is because many youths who enroll in school do so before they start having sex, while others do so after they have already started. Such intervention programs encourage the use of contraceptives, encourage those who are not yet sexually active to delay starting to be so, and encourage those who are not yet sexually active to delay starting to be so in order to decrease the amount of sexual partners among adolescents who are sexually active. Hence, sexual health interventions offer a chance to interact with kids before or just before they start having sexual relations (Kirby, 2011).

Numerous research studies have shown the advantages of sexual health education for youth in developed and developing countries. A review of 83 studies assessing the effect of sex and HIV education programs on sexual behavior in adolescents younger than 25 found that two-thirds of the curriculum-based programs substantially changed one or more of these sexual behaviors.These behaviors included initiating sex, having sex, having it frequently, having many partners, using condoms and other forms of contraception, and taking composite measures of sexual risk-taking. In

contrast, a rise in condom usage among program participants was also seen in 48% of 54 studies that examined the impact of condom use. For instance, 22 research, or 42% of the 52 studies that examined the impacts of commencing sex, assessed the impact of initiating intercourse and revealed a considerable delay in doing so (Kirby et al., 2007).

In Ilorin, Nigeria, a research analyzing the effect of a sex education program on at-unsafe sexual behavior among adolescents in school found favorable in attitudes changes toward the idea that having several partners is not harmful to health. The study also revealed that the experimental group had more knowledge about sexuality than the control group did, and that there was a comparative drop in at-risk behavior (Esere, 2008).

When it came to false conceptions about pregnancy, like "a girl cannot get pregnant the first time she has carnal relations," students from the intervention schools outperformed comparison students on the post-test in a different evaluation study ('The World Starts with Me,' a sexual health education in Ugandan schools). Both attitudes about condom usage and self-efficacy to use condoms significantly differed between the control and intervention groups, with the intervention group having a more favorable attitude toward condom use and better self-efficacy to use a condom (Rijsdijk et al., 2011).

Supporting Peers and Encouraging Empowerment (SPEEK), a school-based and peer-led sex education program in Ghana, had positive short-term impacts in a randomized control experiment. The SPEEK training dramatically improved the students' ability to describe how to use a condom and their attitude toward carrying condoms with them, especially while participating in social events where they were most likely to engage in sexual activity.

When compared to the control group, students in the intervention arm were also able to identify how pregnancy happens and how to do STI testing. They also acquired a high-risk impression of

contracting a STI if they engaged in sexual activity without using condoms, as compared to the control group. The SPEEK program found that young people who get comprehensive sex education had a lower pregnancy rate than those who just receive abstinence-based training or none at all (Krugu et al.., 2017). There were significant differences in the experimental and control groups' perceptions about AIDS transmission and prevention, according to another Nigerian research.

The experimental group considerably outperformed the control group in terms of knowledge of uncontrolled intercourse, sharing needles and syringes as a means of transmission, transfusion with contaminated blood, use of non-sterile tools, and transplacental transfer. Merely 42.8% of the controls knew that HIV might be transmitted from mother to kid, in contrast to 94% of the intervention group. Additionally, compared to only 42.5% and 12.8% of students in the control group, students in the intervention group reported consistently using condoms and using them during their most recent sexual encounter at rates of 53.7% and 20.4%, respectively(Fawole, 2000).

According to Kaushal et al. (2015), considering the significant influence teachers have on the lives of teenagers, sexual health education can also help instructors learn more about sexuality issues and develop more positive attitudes toward the subject. Their study, "Impact of Health Education on the Knowledge and Attitude of Teachers Regarding Reproductive Health of Adolescents," found that teachers' attitudes and knowledge of sexual and reproductive health considerably improved as a consequence of the education. Only 33 (21.3%) of the 155 instructors who were sampled before to the training had sufficient knowledge of the various STIs, whereas 54 (34.8%) of the teachers had sufficient understanding of the transmission routes and prevention of AIDS, respectively. After the intervention, there were 68 teachers who had sufficient knowledge of STIs (a 43.9% increase) and 89 teachers (a 57.4% increase) who had sufficient knowledge of HIV/AIDS prevention.

A Tanzanian school-based sex education program's process evaluation revealed that after receiving training, teachers' attitudes toward teaching about condoms considerably changed. Qualified teachers were reportedly far more open to discussing condoms with primary school students in their last year than their untrained counterparts.

Additionally, it was discovered that they were less inclined to link initiating sexual activity with teaching sex education. The results also showed that instructors' confidence and self-efficacy in their ability to teach sex education as well as other courses had increased. The use of interactive teaching techniques in MEMA kwa Vijana courses and other lessons was reported to have grown by trained teachers, head teachers, and ward coordinators (Renju, 2010).

2.7.4 Challenges of SRH

Knowledge of and access to sexual and reproductive health information are crucial for the psychosocial wellness of teens. Past studies have demonstrated that adolescents who are ignorant of sexual and reproductive health may participate in risky sexual practices. Many countries, like Ghana, have been prompted by this issue to create laws and initiatives to address issues with sexual and reproductive health. Many young people still face barriers that keep them from learning about sexual and reproductive health. The availability of instructors, curricular materials, and teacher training, as well as access to other financial, material, and technical resources, as well as local community and school culture and norms, all restrict the implementation of interventions in schools in poor nations (James-Traore et al., 2004). It has been determined that the program's content and level of implementation both affect how successful sexual health education is. It is known that programs with adequate completeness (amount of the program) and fidelity (execution in accordance with the program rules) may have a positive impact on health (Kalafat, 2007). Curriculum sexual health education implementation relates to how the program is really used, including how completely it is

delivered (quantity) and how it is implemented as planned by its developers (quality or fidelity) (Schutte et al., 2014,) So, a sexual health education intervention's effectiveness could be compromised by a poor or inadequate implementation. Ineffective teacher implementation frequently lessens the efficacy of school-based health education programs (Schutte et al., 2014).

There have been some issues with school-based sexual health education despite the obvious benefits for both students and instructors. Several cultures continue to adhere to ingrained customs and beliefs, such as the notion that young people should delay sexual activity until marriage, despite the dangers to adolescent sexual health and the critical role that schools play in addressing these issues. It is exceedingly difficult for society, especially traditional and religious organizations, to adopt sexual health education completely since parents are frequently at the forefront of opposition to such instruction in schools(Rosen et al., 2004) Many environmental factors, particularly those in Africa, have been found to have an influence on the sexual health education offered in schools, according to research. The teacher's peers or other appropriate authorities, such as the school director and the community, must also possess the information, attitudes, and skills required for the successful implementation of adolescent sexual and reproductive health education.

Parents in Ghana were reportedly unwilling to teach their children about sexual health, which prevented teachers from providing students with this information. Parents' opposition was a result of their worry that if sexual health education is implemented in schools, young people will participate in premarital sex (Kumi- Kyereme et al., 2014). Instructors have also been reported to be against teaching sexual health, particularly on topics like the use of contraceptives, out of concern that pupils will become promiscuous (Iyaniwura, 2004). The worry that talking to their children about sexuality may make them curious and tempt them to engage in sex is another challenge for parents. Adolescents, on the other hand, are unable to have these conversations with their parents because

they worry that it will be assumed that they are actually engaging in sex. According to a survey of some Ghanaian parents, societal conventions and regulations prohibit them from having sexual conversations with their children (Baku, Adanu & Adatara, 2017)

Religion has been shown to be the main impediment to having frank conversations about sex and sexuality at home and in the classroom. According to Jerves et al. (2014), conventional religious conceptions of sexuality distorted parents' perceptions of sex education, leading them to believe that it is a morally and physically risky practice. Although if tradition and culture also had an impact on how people saw sexuality, it was said that religion particularly Catholic and Evangelical played a significant role in defining acceptable sexual behavior. Yet, Muslims in a comparable study in Tanzania expressed reluctance to teach adolescents about sexual health.

Yet adolescents and any discussion of sexuality were also prohibited by culture and conventional beliefs (Mbonile et al., 2008). Another study conducted in Ghana found that discussions about sex and sexuality are socially restrained, which prevents adolescents from having unrestricted conversations on the topic. This societal censorship made kids afraid to ask their parents about anything that concerned their sexuality (Asampong et al., 2013). So, these religious and cultural factors have an impact on how parents, educators, and other guardians view sexuality and what should be covered in sexual health education for teenagers. Discussions on sex and sexuality as a business are prohibited by religious and cultural norms, especially among unmarried adults. Parents and educators are now concerned that sexual health education would increase youth promiscuity. Teenagers in a research claimed that their wards avoided discussing sexuality with since doing so would be seen as approving of their having sex. Because society places such a high importance on virginity before marriage, it is difficult to talk openly about sexuality because it is thought that doing so might encourage premarital sex (Lebese et al., 2013).

The way sex education is conducted is frequently influenced by a teacher's curriculum-related beliefs, including attitudinal, normative, and self-efficacy beliefs. The feasibility of the program and the personal benefits the curriculum provides teachers will both influence their views toward promoting sex education. This relates to how feasible or acceptable the intervention is. The acceptability of curriculum-based sex education is strongly predicted by instructors' perceptions of their abilities and control over sex education teaching and management practices, or self-efficacy (Schutte et al., 2014). The completeness and faithfulness of a sex education program are substantially correlated with teacher benefits, instrumentality, subjective norms, social support, self-efficacy, and student response, according to research from a school-based sex education program in the Netherlands. The study found that instructors were more likely to use a sex education program if they could personally benefit from it, thought the curriculum was helpful, thought that others appreciated and supported the delivery of sexual education, and felt qualified to lead classes. Students were more likely to completely accept a program if they gave it good feedback (Schutte et al., 2014). The motivation of instructors to teach sex education, which has been highlighted as a difficulty, and students' willingness to learn, which has also been identified as a factor, are only two of the many factors that affect how successful sex education programs are. The way sex education programs are created in accordance with students' choices affects their enthusiasm to learn. A student's choice for an autonomous course on HIV/AIDS was substantially correlated with their learning motivation. Consequently, it appears that the independent curriculum design option will best meet the demands of highly driven teenagers (Henk et al., 2007). The independent or separated course approach curriculum describes a sex education program that includes a stand-alone course in the wider education curriculum. Although this strategy may assure that instructors give it enough attention, its success especially in a curriculum that is already overloaded requires a larger commitment from

legislators, school administrators, and teachers (Mathews et al., 2006). According to Craig et al. (2004), the carrier course technique is incorporating sex education or an HIV/AIDS curriculum into a pre-existing course, such integrated science or social studies, as currently the situation in Ghana. Because it is less likely to educate about delicate themes, this strategy creates challenges for success.

The lack of training on teenage sexuality for teachers who manage themes linked to sexuality has been found to be another obstacle to school-based sexual health education. In such situations, teachers have admitted to feeling less secure when addressing or educating children on sexuality-related topics.

WHO (2004) claims that instructors' failure to employ student-centered, participatory approaches that are effective for skill growth because of inadequate training and the dominance of didactic teaching approaches. Teachers are often more supportive of talking with students about taking contraception and having an abortion than they are of teaching puberty-related topics like menstruation, personal hygiene, and the dangers of STIs, according to studies on teachers' views on sex education. (Aransiola et al., 2013).

Yet, when compared to instructors who haven't gotten any training on adolescent sexuality, teachers with training tend to have positive attitudes on adolescents' sexuality and contraceptives and are even more at ease talking to and advising adolescents on sexuality issues(Iyaniwura, 2004).

Iyaniwura, (2004) contends that teachers' attitudes and training are a crucial factor in successful school-based sexual health initiatives. The majority of the times, teachers who lack or receive inadequate training on adolescent sexual health have a negative attitude toward discussing sexual problems with their pupils, especially when it comes to more delicate subjects like contraceptives.

Teachers' ideas about the curriculum, subjective norms, perceived social support, and self-efficacy are all positively impacted by their training. Teachers who have received training are more likely to have positive views toward discussing sexual health issues with students. Training tends to provide teachers expertise over execution, allowing them to feel confident in managing student conduct during sex education and guiding sessions where students practice using condoms on a fake penis (Wiefferink and colleagues, 2005).

Education and Learning Resources on sexuality are essential for effective sexual health education provided in schools because they encourage student participation as well as hands-on teaching and learning. As a result, their absence in schools suggests abstract teaching in which adolescents fail to relate to what is taught. The only resources accessible for sexual health teaching in schools in the majority of underdeveloped nations have been textbooks. Due to their lack of exposure to other pertinent sources of knowledge, students have very limited access to complete sexual information (Pokharel et al., 2006).

Summary of review

Some people prefer to use healthcare professionals because they are more knowledgeable about sexual topics, more at ease discussing them, and more suited to use interactive learning methods. This is because instructors lack the necessary training to deliver sexual health education lessons in an effective manner. By bringing in health experts or other qualified adults to talk about sensitive subjects like condoms in the classroom, it would be able to support educators in avoiding the internal tensions described above and to ease concerns about public reaction. However, budgetary constraints may prevent medical providers from offering comprehensive sexuality education (Ross et al., 2005).

There includes a section on the knowledge, attitudes, and practices of adolescents regarding sexual health, adolescent sexuality, access to sexual health services, and adolescent sexual health education and its challenges.

It might be argued that knowledge of SRH serves as protection against sexually risky practices and the consequences that follow. Risk-taking sexual practices have also become widespread among teenagers. Teenagers are growing more sexually active all over the world. Teenagers in Ghana use contraception at a relatively low rate and high rates of adolescent pregnancies in Ghana and Sub-Saharan Africa

Issues such as socio-cultural beliefs and religious practices frown on the education of young people on such sexual matters. Other factors include age, education, and socioeconomic status. Failure to educate young people on matters of sexuality rather makes them vulnerable and exposes them to risky sexual practices. Approaching sexual and reproductive health education in positive affirmative ways can equip young people with the skills needed to make healthy sexual choices. Once adolescents have open, supportive channels they can make informed decisions about their sexual health. Due to that, Governments have pledged to enhance the SRH of adolescents since the International Conference on Population and Development Key Informant Interview held in Cairo in 1994 by giving them access to thorough, current information, education, and youth-friendly medical treatment. Yet much of the world still fails to live up to these promises, particularly for unmarried adolescents.

Finally, it was revealed that SRH education thrives in an environment of trust and an environment where pupils felt protected and secure. In addition to offering this trust, security and protection, teachers needed to be firm but approachable and have the capacity to moderate the power dynamics

in their classrooms to the benefit of all pupils/students. The evidence showed that Ghanaian Senior High school students did not find their classroom environments welcoming enough to freely participate in sex and sexuality education lessons The existence and effectiveness of the adolescent sexual and reproductive Health Education Program are called into question, due to the high rate of adolescent pregnancies as a result of young people's lack of knowledge and practices about their sexual and reproductive health.

CHAPTER THREE

RESEARCH METHOD

3.0 Introduction

This part examines the study area's background profile. It also discusses the devices used for data collecting and processing, the sampling method/procedure, sample size estimates, and the research design.

3.1 Description of the Study Area

3.1.1 Population Size, Structure and Composition

According to the 2010 Population and Housing Census, Sagnarigu Municipality has 148,099 residents, or 6% of the total population of the area. 50.6% of the population are men, and 49.4% are women. Urban residents make up 93,550 of the district's population, or 63.2 percent. The sex ratio in the district is 102.3. The district has a population that is 37.5 percent younger than 14 years old, illustrating a broad base demographic pyramid that tapers into a small percentage of older people (60+ years old) (5.9%). The district's overall age dependency ratio is 71.2, and the male age dependency ratio is greater (71.9) than the female age dependency ratio (70.5).

3.1.2 Fertility, Mortality and Migration

Total Fertility Rate for the district is 3.3, which is a little more than the region's average of 3.5. The crude birth rate (CBR), which contrasts with the overall fertility rate of 92.8 births per 1000 women aged 15 to 49, is 24.2 per 1000 people.. The crude death rate in the district as a whole is 5.7 per 1000. Age 70 or older is when men experience the highest mortality rate (47.1 deaths per 1000 people), while women do so at age 70 or older (28.4 deaths per 1000 people). Additionally, 7.2% of fatalities in the district are related to violence, homicide, accidents, or suicide, with the remaining fatalities resulting from other causes. In the district, 58.7% of immigrants were born in another

Northern region, and 39.4% were born somewhere else. Individuals from the Upper East make up 30.7% of immigrants from other regions, followed by Ashanti with 14.2% and Upper West with 13.3% (GSS, 2010).

3.2 The Design of the study

The inquiry employed a descriptive cross-sectional study design. A descriptive survey, according to Leedy & Ormrod (2010), is a kind of research approach that employs questions to collect information on the characteristics, opinions, attitudes, daily activities, and experiences of people or groups. Information is obtained from a sample that is typical of the population at a certain point in time for cross-sectional investigations (Orlsen & Marie, 2004). The study's approach is appropriate given that it aims to understand the viewpoints and opinions of both students and instructors regarding sexual health education provided in schools in the Sagnarigu municipality. It also fits with the study because pertinent data were gathered throughout a defined time period. When the researcher has a limited amount of time available, this research style is preferred to a longitudinal study design. Its purpose as a descriptive cross-sectional survey is to give details about the current situation to aid in the creation of interventionist policies. The research may also offer comparative information for future trends.

3.3 Sampling

This section covers the sample size determination

3.3.1 Sample Size Determination

The sample size for the investigation was estimated using the statistical procedure below.

$$N = \frac{z^2 \times pq}{e^2}$$

Where N is the sample size, Z is the $t - value$ (1.96) corresponding to the 95% confidence level, e is the required level of accuracy (0.05), p is the expected proportion of an outcome in the population (0.5), and q is $1 - p$ (1-0.5) = 0.5.

$$N = \frac{1.96^2 \times 0.5(0.5)}{0.05^2}$$

$$N = \frac{3.8416 \times 0.25}{0.0025} = \frac{0.9604}{0.0025}$$

$= 384.16 \approx 384$ with a 5% non-response rate on 384 (0.05×384) = 19.2 the final sample size was 384+19.2 = 403 As a result, a sample of 403 students was participated in the research. Responders were chosen from each of the six schools to allow for comparison analysis. As a result, 408 sets of questionnaires were given out.

3.4 Sampling approach

All the senior high schools within the Sagnarigu Municipality were selected. The following senior high schools are found in the municipality.

- Tamale Islamic Senior High School
- Bussiness College International
- Northern School Of Business Senior High
- Kalpohini Senior High School
- Tamale Senior High School
- Al-Maktoum Senior High School

A list of (second and third) year students in each of the schools was acquired from the different School Administrations because the first year students were not in the school at the time of data

collection. The techniques used to sample individuals from each of the schools was based on sex proportional to size and stratified. Then, for the purpose of this research, random selection using the lottery method was utilized to choose specific respondents from both sexes. This was considered crucial in order to guarantee that the responses of both male and female students were sufficiently represented. A piece of paper containing (yes) or (no) was given to the adolescent to select. Adolescent students who selected a piece of paper with the word "yes" on it were taken into consideration for the research. The questionnaire was then administered to students in one large classroom.

3.5 Study Variables

The research sample, tool, environment, and data analysis used in the study are all described in this section. Examining sexual and reproductive health of adolescents was the result (dependent) variable, which was examined by dependent variables:

- Dependent variables;

    1. Practices.
    2. Attitudes.
    3. Students' evaluation of sexual health education in school.
    4. Students' assessment of teachers.
    5. Teachers' and students' view on how sexual health education should be handled.

- Independent variable; knowledge.

- Others; sex, religion, age, type of school etc.

All the above variables were measured in percentages and frequencies.

3.6 Data Collection Tools

Using both primary and secondary sources of data, the study's mixed approach of data collecting adhered to typical social science research criteria. Accordingly, the research used a structured questionnaire as well as an in-depth interview guide and a focus group discussion guide. Quantitative information was gathered from a select group of students using a self-administered questionnaire. The questionnaire was dividing into two sections A and B. Section A covered information on socio-demographic characteristics. Information on respondents' knowledge, attitudes, and behaviors about sexual and reproductive health was addressed in Section B. Multiple replies were included, along with open-ended questions like "please indicate" and "please give reasons." Binary response patterns like "Yes" or "No" were also incorporated. The questionnaire also included rating scales.

Focus group discussion was used to gather qualitative information on sexual health education barriers, attitudes toward teaching sexual health, and students' access to sexual health services and information from selected students.

An in-depth interview was used to solicit information from selected teachers about the following issues: students' sexual behavior and their practices with adolescent reproductive and sexual health; the strengths, shortcomings, opportunities, and risks of the sexual health program in schools.

3.7 Data Collection Techniques

To get quantitative data, students were questioned using a self-administered questionnaire. The survey was generated by adapting questions from the Ghana Demographic and Health Survey (GDHS, 2008) instruments. From the study by Adamchak et al. (2000), additional questions (knowledge, attitude, and actions) about teenagers' sexual health were taken and pre-tested. Also, there were two separate Focus Group Discussions (FGDs) one with male and another with female students.

Before data collection, the researcher recruited four research assistants to help collect the data. Two nursing students (level 300) (female and male),one medical student (male) and one education student (400) (female). The researcher trained and explained to them the topic and the objectives of the study. The researcher guided them on how to answer and explained the questionnaire to the respondents. He also trained them on how to take notes, observe and record. The whole study was demonstrated before going to the field.

All senior high schools under Sagnarigu municipality were covered by this study without exception. The researcher pre informed the schools by a written permission, a cover letter from Ghana Education Services Northern Region questionnaire and consent form. Timelines to get respondents were given by the schools. Each school was to have 63 questionnaires per the sample size but some of the schools couldn’t provide respondents up that number and others provide more students to balance it. Like Northern School of Business Senior High School and BCI were able to provide more respondents. In the permission letter the researcher indicated the number of students for study in each school. Some of them provided the number of respondents before we got there and others random selection utilizing the lottery method was used to choose specific respondents from both sexes. This was considered crucial in order to guarantee that the responses of both male and female students

were sufficiently represented. Adolescent students who selected a piece of paper with the word "yes" on it were taken into consideration for the research. The consent form was read to them and explained to them before answering. On average of 30-45 minutes were used to answer the questionnaires. The questionnaire were then administered to the students in one large classroom in each school.380 questionnaires was administered and all returned. The questionnaire deals with the quantitative aspects and (FGDs and IDI) were the qualitative aspects.

Focus group discussion was conducted in two schools. Convenience sampling technique was used to select 20 participants, 10 males and 10 females from all the schools with respect to their numbers. FGDs were focus on questions which was not covered by the questionnaires. The discussions were handled by the researcher and the assistances. The respondents were given a paper and pen to write if they feel that they cannot say something aside the assistances. The focus group discussion took 45-60 minutes to finish.

An in-depth interview was conducted in all the schools. Purposively, two teachers were chosen to be part of the research population. In this way, all educators working in certain Senior High schools within the Municipality who were involved in sexual health education were included.

The main objective was to evaluate the attitudes and knowledge of instructors assigned to the role of counselor, among other things. This is significant because, among other things, achieving the program's objectives depends heavily on the quality of instruction. Examining the difficulties school counselors encounter may also aid in suggesting corrective actions for successful sexual health programs in senior high schools. The interview was done by the researcher with help of guide by seeking the consent of teacher before questioning. It was face to face interview. A recording device

was used to capture the interview. Furthermore, participant nonverbal signals were captured by taking notes. The interview was conducted within an hour.

3.8 Quality Control

Training was provided to research assistants to guarantee quality control. This was finished before the data gathering instruments. The training's goal is to make sure that research assistants are aware of the study's topic, goals, sensitivity to sexuality-related issues, and requirement for confidentiality.

3.8.1 Pre-testing of Research Instruments

Pre-testing of research tools was carried out at Tamale Technical University's Senior High School and Intermediate programs.

Because it was one of the senior high schools in the survey that was not chosen, this particular school was chosen for the exercise. The pre-testing exercise aimed primarily at ascertaining the consistency, appropriateness and reliability of the research instruments. The exercise helped in making the necessary corrections on the draft instruments and in producing the final instruments used in the study.

3.9 Data Processing and Analyses

To ensure completeness, the gathered data were cross-checked. During the data cleaning process, logical approaches were used to discover mistakes. 380 copies of the survey were used in the data analysis. Quantitative data was statistically analyzed using the Statistical Package for the Social Sciences (SPSS) version 24.0. Descriptive statistics were used to examine the quantitative data. Manual review, verbatim transcription, and audio recording were done for IDI and FGDs. Notes taken during the interview and discussions were analyzed to determine common themes that ran through participants' responses. The identified patterns of information were categorized into themes

and sub-themes relative to the research questions/objectives. These themes were further compared to the information gathered through the literature review to identify the similarities and variations.

3.10 Ethical Considerations.

A system of values that direct a person's actions or conduct is referred to as ethics. It is also a methodical effort to defend certain values, or a group of values, and to identify the behaviors that best represent or advance these values (Bunton and Macdonald, 2004). Because of this, the following moral guidelines were followed while carrying out this research.

- **Informed Consent**: This is the procedure by which a patient (participant) consents to receive treatment or take part in a trial or study after learning about the goals, advantages, and potential hazards of the intervention (study) (American Medical Association, n.d.).

  The participants received comprehensive information about the research via the consent form. These include details about the researcher, the goal of the study, the methodology, the opportunity to participate voluntarily and the freedom to stop at any moment without facing consequences. It also described the use of pseudonyms to safeguard secrecy, how to safely store notes, possible hazards and how to reduce them, and the main researcher's contact details. No one was forced or tricked into taking part in the research; instead, participants gave their verbal agreement after receiving a thorough explanation.

- **Confidentiality**: The notes made during the interview were only accessible to the researcher due to the confidentiality of the information collected from the participants. Nothing individually identifiable was recorded. This was required to ensure that, in the unlikely case of an unintentional security compromise, replies could not be linked to individual

participants. Furthermore, the identities that are used to publish the findings are pseudonyms, or made-up names, that were given to participants in order to safeguard their identity.

- **Self-Determination**: No one was forced or compelled to take part in the study or provide the researcher any information. They were free to take part in the discussion and to choose whether or not to respond to any of the questions posed. Their choices and views were honored.

Also, there was an introductory letter that results from the approval process with the GES regional office that was used to gain entrance to various schools in the municipality.

CHAPTER FOUR

RESULTS

4.0 Introduction

Based on the examination of both quantitative and qualitative data, the research's findings are presented in this chapter. The section is broken down into five subsections: socio demographic factors; students' sexual health knowledge, attitudes, and practices; students' access to sexual health care services; teachers' and students' views on school-based sexual health education; and challenges associated with such education. A total of 380 surveys were given out, two focus groups for boys and girls in two schools were convened, and two instructors' in-depth interviews were conducted in each school. 100% of students answered questionnaire.

4.1 Socio-Demographic Characteristics

Age, sex, religion, type of school, and status of pupils were examined in different ways with regard to socio-demographic characteristics of the participating community. Regarding age, 13.2% of respondents were between the ages of 13 and 16, while 86.8% of all respondents were between the ages of 17 and 19, with a mean age of 17.67. Muslims made up 80.8% of the population, while Christians made up 19.2% of the people. BCI had the largest percentage of responders (90, or 23.7%) in terms of the kind of school. Boarders made up 70% of the respondents, while day students made up 30%. 49.8% of responders were men, and 50.2% were women.

Table 4.1: Socio demographic characteristics

VARIABLE	FREQUENCY(n)	PERCENTAGE (%)
Age		
13-16	50	13.2

17-19	330	86.8
Religion		
Muslims	307	80.8
Christians	73	19.2
Type Of school		
Kalisco	60	15.8
Nobisco	69	18.2
Tamasco	61	16.1
Tissec	60	15.8
Bci	90	23.7
Almakiss	40	10.4
Status of Students		
Day	114	30
Border	266	70
Sex		
Male	187	49.8
Female	193	50.2
Parents Level of Education		

Primary	69	18.2
Junior High School	74	19.5
Senior High School	75	19.7
Tertiary	35	9.2
No Education	127	33.4
Parent Marital Status		
Single Parenting	164	43.2
Both	216	56.8

(Source; Field Survey, 2023)

4.2 Adolescent Sexual and Reproductive Health Knowledge

4.2.1 Pregnancy and Menstrual Health Knowledge

Regarding understanding of pregnancy and menstruation, a number of questions were posed. Fewer than half of respondents (47.3%) are aware that only physical changes occur during adolescence and not psychological ones. With a menstrual cycle for more than once a month is not a problem question 40% of respondents indicated that a problem exists. Almost 68.7% were unsure if an unwanted pregnancy could lead to an abortion. Seventy-four percent of respondents stated that unprotected sex results in a girl being pregnant before her first menstrual period. Sixty-one percent of respondents are aware that an interval of at least two years between birth and conception can minimize the risk of maternal health complications. The majority of respondents (74.4%) are aware that after menarche, a girl might become pregnant during her first unprotected sexual experience. 53% of respondents were unaware that a female can become pregnant after unprotected sex with a boy if the boy withdraws before ejaculation. The results of the focus group indicate that some adolescents are unable to identify sexual and reproductive health. A respondent characterized sexual and reproductive health as

"*the condition in which a man and a woman engage in sexual activity in order to have healthy children". (Laughs)* (***MFGDs1 SCH2***)

FGDs revealed that a number of respondents held misunderstandings regarding becoming pregnant. Respondents state that "*when a woman consumes large quantities of Nescafé and have intercourse, she will not become pregnant" (**MFGDs1SCH1**)*

*"The sperm will not remain in the vagina if the woman is on top, there will be no pregnancy" (**F FGDs2SCH1**)*

*"It is impossible to become pregnant if shea butter is applied to the vaginal area prior to sexual activity" (**FFGDs1SCH2**)*

These are some of the myths uncovered by the FGDs. Additional inquiries were made regarding the origins of these misconceptions. If at home, the majority of respondents get their information from colleges, the internet, television, radio, and social media.

Table 4.2.1: KNOWLEDGE OF PREGNANCY AND MENSES

VARIABLE		FREQUENCY	PERCENT
Only physical changes occurs but not psychological changes during adolescence	Yes	180	47.4
	No	115	30.3
	Not Sure	85	22.3
Menstrual cycle more than once in a month is not a problem	Yes	127	33.4
	No	152	40
	Not Sure	101	26.6
Unintended pregnancy might cause abortion			

	Yes	86	22.6
	No	34	8.9
	Not Sure	260	68.5
Can a girl get pregnant before first menses with unprotected sex	Yes	282	74.2
	No	81	21.3
	Not Sure	17	4.5
A birth to the conception of interval at least two years can reduce the risk of maternal health	Yes	231	60.8
	No	29	7.6
	Not Sure	120	31.6
Can a girl who has reached menarche become pregnant on her first sexual encounter?	Yes	284	74.7
	No	66	17.4
	Not Sure	30	7.9
Can a girl get pregnant after having unprotected sex with boy if the boy withdraw before ejaculation	Yes	127	33.4
	No	201	52.9
	Not Sure	52	13.7
OVERALL KNOWLEDGE OF PREGNANCY AND MENSES	Good Knowledge	38	10
	Fair Knowledge	114	30
	Insufficient Knowledge	228	60

(Source; Field Survey, 2023)

4.2.2 Knowledge of Contraceptives

In the (**Table 4.2.2)** below, most (91.6%) of the respondents know the male condom as a contraceptive and injectable (DEPO) being the least (21.1%) method known. The overall knowledge of contraceptives stated that 19.8% of the respondents are having good knowledge, 38.2% of them have fair knowledge and the majority of them have insufficient knowledge (41.8%)

The findings in the focus group also revealed the most well-known topic among teenagers in schools is condoms. Adolescents in the schools who are sexually active will not prefer family planning since they are still in school. Some adolescents have myths and negative beliefs about contraceptives. Some of the respondents made the following statement about contraceptives. A male respondent said; "*Most of the contraceptives are very risky and can cause damage to some of the organs and even cause death to adolescent"* (***MFGDs1 SCH1***)

Another female respondent also said; "*If you are using Norplant you will not give birth in the future" **(FFGDs2 SCH1)***

Some of the respondents didn't know some contraceptives. A lady asked: "*Sir, what is IUD? I have never heard of it". (Laughs) (**FFGDs 1 SCH1**)*

Table 4.2.2 Knowledge of Contraceptives *(Source; Field Survey, 2023)*

VARIABLE		FREQUENCY	PERCENTAGES
Knowledge of norplant	YES	100	26.3
	NO	280	73.7

Knowledge of pills	YES	119	31.2
	NO	261	68.7
Knowledge of IUD	YES	106	27.9
	NO	274	72.1
Knowledge of injectable (DEPO)	YES	80	21.1
	NO	300	78.9
Knowledge of diaphragm	YES	112	29.5
	NO	268	70.5
Knowledge of female condom	YES	273	71.8
	NO	107	28.2
Knowledge of male condom	YES	348	91.6
	NO	32	8.4

Knowledge of emergency contraceptives	YES	153	40.3
	NO	227	59.7
Knowledge of natural methods	YES	173	45.5
	NO	207	54.5
Knowledge of withdrawal method	YES	151	38.7
	NO	229	60.3
		Frequency	**Percentage**
Overall Knowledge of Contraceptives	**Good Knowledge**	75	19.7
	Fair Knowledge	146	38.4
	Insufficient Knowledge	159	41.9

(Source; Field Survey, 2023)

4.3 Attitudes toward Adolescent Sexual and Reproductive Health

Table 4.3 below shows a series of questions about the negative or positive attitudes of adolescents toward menses, pregnancies, and contraceptives. Starting from the experience of first menses most (51.5%) of the adolescents felt scared, 23% of them felt shy 21.6% felt normal and finally 3.1% felt embarrassed. The next question was whether sexually active unmarried adolescents should have access to contraceptives. More than half (63.4%) of the adolescents said yes and 36.6% said no.

The findings in the FGDs indicate the reason why the majority said yes. A female said: "*Unmarried adolescents should be allowed to have access to contraceptives to prevent them from STIs and teenage pregnancies" (**FFGDs2SCH1**)*

Another male respondent stated: "*Sexually-active adolescents should be allowed to use contraceptives if not they will be having unprotected sex every time which can expose them to diseases and unwanted pregnancies" (**MFGDs1SCH1**)*

For those who are not in favor of this, their reasons are coming from the religious and moral values.

*"They should repent to GOD and live a chaste life till they marry. They should not be allowed to use it" (**FFGDs2SCH1**)*

*"If they used contraceptives they will not have feelings" (**MFGDs1SCH1**)*

*"It is sin that should not be continued by using contraceptives"(**MFGDs2SCH**)*

A question was put forward to the respondents to indicate whether they would ever use contraceptives in the future. Here we want to know their feelings which can be negative or positive or neutral 57% consider using contraceptives in future whiles 43% of the respondents never consider using contraceptives. Most (69.7%) adolescents chose condoms as a method to be used in the future.

In the FGDs some of the respondents also said that they will never use contraceptives. A female respondent said:

"I will never have sex with any man until I marry and if I marry I will not use any contraceptives" (***FFGDs2SCH2***)

All the religious organizations in Ghana are preaching abstinence till marriage. Because of that most of the respondents are attached to their religious beliefs. A male respondent stated:

"God said we should not have sex before marriage" (***MFGDs1SCH1***)

A guy said: "*there is no need to use a contraceptive if you are not married because you are not supposed to have sex"* (***MFGDs1SH2***)

Contrary to the above some of the respondents have the intention to use contraceptives. A female respondent said: "*No problem you can use contraceptives"* (***FFGDs1SCH1***)

Some of them are having misconceptions about the effects of contraceptives usages. A male student states:

"They said condoms can cause low sperm count" (***MFGDs1SCH1***)

Another female respondent also stated: "*Using pills can cause barrenness in females and vasectomy causes impotence in males"* (***FFGDs2SCH1***)

With regards to the actions students will take when pregnant or impregnate somebody 41% said they will stop schooling and keep the pregnancy, 30% said they will have an abortion and continue schooling and 29% didn't know what to do. The adolescent answered the question as to where to get

abortion services when in need. The results show that 61.3% choose health facilities as a place to seek abortion services when in need.

Even though health facility was chosen as place adolescents go for abortion, FGDs findings show that there are some local concoction and hard drugs that are used to terminate pregnancies. The following are some of the responses. "*They use grinned broken bottles and alcohol and others used paracetamol"* (***MFGDs2SCH1***)

"They used energy drinks like five star and others and mix them with trimol" (***FFGDs1SCH2***)

The opinion of the teachers was also taken. Most of the teachers accept the views that sexually active adolescents can have access to contraceptives and 43% of teachers said no. The following are their reasons for those in favor and those who are not in favor.

A teacher who is in favor stated:

"The students are already there, they have sex haphazardly if they see any dark place they want to use it as an opportunity. They should be allowed to have access to contraceptives to prevent unwanted pregnancies and STIs". (***SCHOOL COUNSELOR IDI***)

Another teacher respondent; "*yes, I will recommend they should be given enough knowledge of contraceptives for them to protect themselves against unwanted pregnancies and STIs. Since they are sexually active they will be having sex"* (***BIOLOGY TEACHER IDI***)

Contrary to what is above, a teacher said: "*I will not recommend sexually active adolescents to have access to contraceptives, it will give them go ahead to have sex without fear but if they know that they can contract diseases or pregnancy they will not go there".* (***HEALTH TUTOR***)

The teachers are surely aware of the existence of sexual activity among adolescents. Because of that most of them have favored contraceptive knowledge among adolescents to protect them against STIs and unwanted pregnancies. STIs are rising especially HIV/AIDS among adolescents which the teachers are aware may be the reason.

Table 4.3 Adolescent Sexual and Reproductive Health Attitudes

VARIABLE	FREQUENCY	PERCENT
Experience of menarche		
Shy	46	23.7
Normal	42	21.6
Embarrassed	6	3.2
Scared	100	51.5
Should sexually active unmarried adolescent have access to contraceptives		
Yes	241	63.4
No	139	36.6
Students consideration on contraceptive method in future		
Yes	216	56.8
No	164	43.2
Contraceptive methods students will be used in future		

Condom	265	69.7
Pill	40	10.5
Emergency Contraceptives	35	9.3
Norplant	16	4.2
Injectable	8	2.1
Natural Method	7	1.8
Withdrawal	9	2.4
Actions student will take when pregnant or impregnate somebody		
Drop out of school and maintain the pregnancy	154	40.5
Have an abortion and keep going to school	117	30.8
Not sure	109	28.7
Where students get help for abortion		
Health facility	233	61.3
Drug store	62	16.3
Private service provider	71	18.7
Local medicine	14	3.7

(Source; Field Survey, 2023)

4.4 Adolescent Sexual and Reproductive Health Practices.

4.4.1 Adolescent Sexual and Reproductive Health Practices

In the table below close to half of the respondents (49%) ever had sex and 51% said no. This shows that most of the adolescents in senior high schools are sexually active even though a little bit majority said they are not. In the FGDs, the same question was asked but all respondents said there were still kids. A guy said: "*Subhanallah we don't do such things we are still kids"* (*laughs*) (***MFGDs1SCH1***)

There were having reservations about the question which is why they didn't want to provide the right answers. So when probed further with detailed explanations they came up with valid responses. A lady said: "*Sir we are not virgins some of us are into sex frankly speaking"* (***FFGDs2SCH1***)

Some of them lost their virginity at a very tender age by force and that has caused them to have sex continuously. A lady confessed: "*I lost my virginity at age 8 with some wicked married man. Hmm, I have not forgiven him. Now I cannot resist sex".* (***FFGDs2SCH1***)

The question was whether respondents had ever impregnated a girl or become pregnant. According to the findings, 8.7% of the respondents have ever become pregnant or impregnated a girl.

The overall STIs symptoms ever experienced stated that 27.6% of the adolescents have higher symptoms of STIs experienced and 26.8% have no STIs symptoms. The FGDs results show that. A respondents stated: "*even now I have not find a lasting solution to it I am still feeling pains if I urinate and the urine doesn't flow".* (***MFGDsSCH6***)

The last question about STIs experienced was what students will do when start to experience any signs and symptoms of STIs, 64.7% of them said they go to the health facility for treatment.

Table 4.4.1 Adolescent Sexual and Reproductive Health Practices.

VARIABLE	FREQUENCY	PERCENT
Ever had sex		
Yes	187	48.7
No	193	51.3
Ever been pregnant or impregnated a girl		
YES	33	8.7
NO	347	91.3
STIs experiences		
Experience of white (Candida)		
YES	161	42.4
NO	219	57.6
Experience of painful urination		
YES	113	29.7
NO	267	70.3
Experience of swelling of the scrotum		
YES	37	9.8
NO	342	90.2
Experience of itching around the genitals		

YES	168	44.2
NO	212	55.8
Experience of vaginal discharge		
YES	91	23.9
NO	289	76.1
Experience of discharge from the penis		
YES	51	13.4
NO	329	86.6
Overall STIs symptoms ever experienced		
High Symptoms	105	27.6
Moderate Symptoms	84	22.1
Lower Symptoms	89	23.4
No Symptoms	102	26.9
What students will do when start to experience any sign and symptoms of STIs		
Go to the hospital to get treated	246	64.7
Go to the drug store for medicine	42	11.1
Leave it to go of its own	59	15.5
Treat it with local medicine	33	8.7

(Source; Field Survey, 2023)

4.4.2 Uses of Contraceptives

From the table above it is very clear that the male condom was most used (15%), female condom was the least used (1.8%) followed by pills and emergency contraceptives (2.9% and 3.9%) and the second most used method was injectable (4.2%). This is very obvious that respondents are engaged in risky sexual behavior because 25.4% out of 49%of sexually active students are not using contraceptives. This means that contraceptive usage among sexually active adolescents in schools is not encouraging or is very poor. In the FGDs results some of the respondents make a comment that; "*I prefer it raw if there is contraceptive I don't enjoy it".* (***FFGDs2SCH1***)

Among sexually risky practices, some of the respondents confessed that they have multiple boyfriends. The reason was that most of the girls are confronted with financial problems which led them to practice multiple sex partners with different men for a living. A guy said: "*some of the girls have more than one boyfriend on campus and outside. (Laughs) The outside ones are filling the chop box and money and campus ones are servicing them even though the outside ones also service small (laughs)" (**MFGDs1SCH2**)*

Some of the respondents practice sexual activity because of peer group pressure. They have the belief that if you don't have a boy/girl it means you are not attractive. So because of that, they are forced to have one, and if he/she requests they will give to maintain him/her. A lady said; "*some of us are force into sex because both class and dormitory they will teasing us, that you are not attracted to anyone on campus and outside that is why you are single". (**FFGDs2SCH1**)*

Respondents saw sex as a form of fun that will ease worries. "A male student said; *sex is fun that will ease you from worries so that you can study well well. (Laughs)" (**FFGDs2SCH1**)*

Some of them consider wet dreams to be part of physical sex activity. A lady said: "*sir please I always have sex in my dream with one guy whom I never seen in life and if I wake up I feel that someone have sex with me can I lose my virginity through that". (**FFGDs2SHCH1**)*

The respondents try to equate physicality with spirituality. Dreams are not real so there is no way a person will have sex in a dream and claims it's real sex.

Table 4.4.2 Uses of contraceptives

VARIABLE	ANSWER	FREQUENCY	PERCENTAGE
Use Norplant before	Yes	0	0
	No	380	100
Use pills before	Yes	11	2.9
	No	369	97.1
Use IUD before	Yes	0	0
	No	380	100
Use injectable (DEPO) before	Yes	16	4.2
	No	364	95.8
Use diaphragm before	Yes	0	0
	No	380	100
Use female condom before	Yes	7	1.8

	No	373	98.2
Use male condom before	Yes	56	14.7
	No	323	85
Use emergency contraceptives before	Yes	15	3.9
	No	365	96.1
Use natural methods before	Yes	0	0
	No	380	100
Use withdrawal method before	Yes	0	0
	No	380	100
Overall practices of contraceptives	**Use more than one**	18	6.7
	Use one	72	18.9
	Never use	290	74.4

(Source; Field Survey, 2023)

4.5 Access to Sexual Health Information and Services

The availability of sexual health information and services is crucial for adolescent sexual health. This will help them to have safer sexual health practices. This study measured access in four areas namely; geographical location, financial constraints, and attitude of parents and health workers.

4.5.1 Geographical Barrier

Respondent's views were solicited with regard to geographical challenges. Those who stayed in towns or urban areas did not have problems accessing sexual health services and information. Those in rural areas after vacations or completion suffer severely with regard to sexual health information

and services. A participants lament that; "*in my community, there is no health facility. You have to ride to the far to get one. So it makes difficult to have access information concerning our sexual reproductive health"*. (***FFGDs2SSCH1***)

Some of them complain bitterly about the location of their schools relative to health facilities. One boarding house student said; "*our school, we far from the hospital which makes it difficult to move from school to hospital if you have a problem with regards to sexual health".* (***MFGDs1SCH6***)

4.5.2 Financial Constraints

The cost of seeking healthcare is also a challenge as the respondents know where to get the services but the amount for the services is expensive. A male said:

"Sometimes you have an idea as to where to go get the information services on sexual health but due to amount that you will pay you can't get access to it because is very expensive". (***MFGDs1SCH1***)

Since there is NHIS why are they seeing the cost of healthcare seeking as a barrier? Respondent commented on the existence of the National Health Insurance Scheme: "*the NHIS is not helping us because it does not cover all services of sexual health especially testing of HIV and STIs services and abortion services".(**FFGDs2SCH1**)*

Some participants also make the following statements: "*If you go to the hospital with the NHIS card they will delay you and finally give you paracetamol and write the rest for you to go and buy". **(MFGDs1SCH2)***

"I once had pain and whitish discharge from my organ I went to school health tutor and explain and he gave me note to go to the hospital but I didn't go because no money". (***FFGDs2SCH1***)

4.5.3 Attitudes of Parents

Parents' attitudes towards their children in accessing sexual health information and services are a big challenge. Some of the respondents said that their parents will not even want them to discuss it. A respondent said: "*My parents become furious when you talk about sex or pregnancy they will start cursing you they will not even take time to listen". (**FFGDs1SCH2**)*

Some of the respondents also confirmed that some parents are the best in terms of accessing sexual health information and services; "*My mother is a nurse, she thought me a lot about my sexual health right from menses to conception. But unfortunately, I became sexually active at 15 and my mother got to know she didn't curse or do something bad she advised me and took me to the hospital for contraceptive methods that can protect me".(**FFGDs2SCH1**)*

Another participant said; "*in my community, if a lady is mistakenly got pregnant the parent will pack her to the man for free". (**MFGDs1SCH2**)*

4.5.4 Attitudes of Health Workers

Respondents in the FGDs agree that the attitude of some health workers is a big challenge and scary in accessing sexual health information and services. Respondent lamented of being accused of sexual activity when she was innocent; "*There was this experience; I missed my period last year February I didn't know why because I didn't have sex. So I went to the hospital and after I explain my problem to the doctor, he accused me for having sex haphazardly instead studying and after that, he carry out a urinal test. He found out that there is nothing like that and he gave me medicine and the third day the blood came*''**. (*FFGDs2SCH1*)**

Another respondent was being accused of buying pills: "*I remember I went to a pharmacy to buy pills and I was wearing uniform inside the nurse started insulting me that instead of me to be*

studying I am busy buying pills to have sex. I am only advising you because you are too small. Anyway, I am selling". (***FFGDs2SCH1***)

Respondents said that there is no privacy in the hospital: "*they should be absolute privacy in the hospital because you may want to discuss your problem to the doctor and the nurses are around you will just change the topic"* (***MFGDs1SCH1***)

Due to the insults and lack of confidentiality of health workers, a respondent gave a story of her colleague; "*Hmm up to now I don't know the situation of my dormitory colleague she was pregnant and wanted to do abortion, so I advised her to go to the hospital but she said if she goes they will insult her even make it known to school authority especially when they see you in any place they say it. Finally, she used the crude way in the dormitory and she was caught bleeding profusely and she was sent to the hospital. I don't know what happened next but she is no more in the school". (**FFGDs2SCH1**)*

Another participant said: "*Last time I went hospital last year July I was feeling pains whenever I urinate and the urine does not flow well too. The doctor quickly accused me of having sex which is not true in the midst of nurses and told the nurses"* (***MFGDs1SCH1***)

Aside from the above, some of the respondents were having preferences with regard to the gender of the health personnel. They make the following statements:

"I always like the male doctors when you go to hospital with the problem, they will give you enough time but if you are not fortunate and meet a female doctor, she will be on her phone whiles listening to you" (***MFGDs2SCH1***)

*"For me the female doctors are good they call spade a spade". (**FFGDs1SCH2**)*

4.5.5 Student Status

Due to limits on the ICT Labs and the use of phones, several respondents who live in boarding homes found it difficult to get information about sexual health.. A student said: "*if you are in the house you have a phone you can search for sexual health information in the internet and all media but in the school ICT lab is not even working they will not even give you chance to search". **(MFGDs2SCH2)***

Another respondent said: *It is true that day students are having enough avenues to access sexual health information and services because they are radio and TV discussion almost every day about the sexual health and they also have phones to go to net. **(FFGDs2SCH2)***

4.6 Teachers and Students' Views on School-Based Adolescent Sexual and Reproductive Health Education

4.6.1 Students' Assessment of Adolescent Sexual and Reproductive Health Education in School

The overall views of the respondents on school-based sexual health education and methods of teaching it were assessed. From the table above 83% of the participants received information on emotional changes related to adolescent development. This is very important because it will help them to know how to handle themselves when changes are due and also know how to protect themselves against unhealthy sexual behavior. More than 50% of the respondents disagree that they have had information on various types of contraceptives. The overall of sexual health information and STIs in the school state that only 17% were informed and 83% were not informed. The method of teaching sexual health was assessed. 42% of the adolescents said that teachers are not motivating them to study sexual health and 53% of them strongly disagree that the school's instructional methods helped them understand how to engage in safer sexual behavior. The overall assessment of

teachers' methods of teaching sexual health was, 7.1% used good methods and 92.9% does not have a good method of teaching.

This is in line with the knowledge of contraceptives where the respondents were asked to identify the types of contraceptives. Apart from condoms few of them could identify the other contraceptives. In contradictory to the above, findings from the in-depth interview of teacher: some of the teachers are of the view that the students should be given detailed knowledge of sexual health education. One of the teachers suggests that; "*the students are already there whether you teach or not they are having sex haphazardly if they see any dark place they want to use it as an opportunity. They should be allowed access to contraceptives to prevent unwanted pregnancies and STIs"*. (***Social Studies Teacher, In-depth Interview School 4***)

Another teacher makes a statement contrary to the above:

*"Oooi if you give them chance to have access to contraceptives then they will have sex everywhere because some of them are sexually active". (**Science Teacher in-depth interview SCH6**)*

More than 50% of the teachers are of the view that students should not be given detailed comprehensive sexual health education. But topics like menstruation, the reproductive system, and personal hygiene should be taught.

Surprisingly the findings in the FGDs of the students confirmed that even those topics stated above students still lack knowledge with regards to those topics. A student respondent confirmed that: "*We felt scared when we started menstruation Because we don't have enough information about menstruation"*. (***FFGDs2SCH1***)

In the quantitative results with regards to a question on experience on first menstruation, 55% of the respondents felt scared because they don't have enough knowledge of menstruation. Some of the still insist that knowledge of sexual health education is important. a lady stated that: "*It is important for us to know details of the physical and emotional changes in our body as we grow to prevent us from harming ourselves".* (***FFGDs1SCH1***)

Table 4.6.1 Students Assessment of Adolescent Sexual and Reproductive Health Education in School

VARIABLE	AGREE	STRONGLY AGREE	UNDECIDED	DISAGREE	STRONGLY DISAGREE
I have received information on emotional changes related to adolescent development	190	124	33	23	10
	50	32.6	8.7	6.1	2.6
I have received information on the physical changes that occur during adolescence	148	117	63	39	13
	38.9	30.8	16.6	10.3	3.4
I have information on where STIs and HIV counseling and testing services are provided	40	14	124	133	69
	10.5	3.7	32.6	35	18.2
I have had information on various types of contraceptives	42	13	117	152	56
	11.1	3.4	30.8	40	14.7

I have received information on how to effective use some methods of contraceptives	33	14	115	165	53
	8.7	3.7	30.3	43.4	13.9
I have received information on the side effects of some contraceptives	32	12	96	185	55
	8.4	3.2	25.3	48.6	14.5
I have received information on where to acquire contraceptives	26	17	103	171	63
	6.8	4.5	27.1	45	16.6
I have received information on the consequences of unplanned pregnancy on my health	30	12	119	163	56
	7.9	3.2	31.3	42.9	14.7
I have been educated on the need to refuse unprotected sex	27	22	112	167	52
	7.1	5.8	29.5	43.9	13.7
I have been educated on the effects of negatives peer pressure and on risky sexual behavior	36	11	120	157	56
	9.5	2.9	31.6	41.3	14.7
I am satisfied with what I am taught in sexual health education	7	8	21	111	233
	1.8	2.1	5.5	29.2	61.4
				(F)	**(P)**
Sexual Health Information and STIs	**Strongly Informed**			30	7.9
	Fairly Informed			34	8.9

	Not Informed	316	83.2

(Source; Field Survey, 2023)

Table 4.6.3 Students Assessment of Teachers on Adolescent Sexual and Reproductive Health Education in School.

ARIABLE	AGREE	STRONGLY AGREE	UNDECIDED	DISAGREE	STRONGLY DISAGREE
achers in this school take teaching ual health education seriously	30	9	137	136	68
	7.9	2.4	36.1	35.8	17.8
achers motivated me to learn about ual health	48	12	160	118	42
	12.5	3.2	42.1	31.1	11.1
e teaching strategies used in school ped me learn how to practice safer	5	3	28	143	201
	1.3	0.8	7.4	37.6	52.9
e teacher motivated me to access id information and sexual health services	26	6	145	159	44
	6.8	1.6	38.2	41.8	11.6

		Frequency	**Percentage**
Overall Student's Assessment of Teachers on ASRH Education	**Good**	12	3.2
	Fair	15	3.9
	Insufficient	353	92.9

(Source; Field Survey, 2023)

4.7 Availability of ASRH in Schools

The importance of knowledge of sexual and reproductive health education in schools was expressed by the teachers and students. This knowledge will enable adolescents to protect themselves against unwanted pregnancies and STIs. This will also help them know the physiology and anatomy of their bodies and how to take care of both. Teachers and students have seen the importance of sexual health education but as to whether the knowledge is available or enough in the schools. Some of the respondents in the FGDs session complain bitterly about teachers not going deep. A respondent said; "*They teach us sexual health but they don't go deep they think we are kids"*. (***MFGDs2SCH1***)

Some of the teachers confessed that the sexual health education in the schools doesn't address adolescent sexual health problems. A teacher from the in-depth interview stated that; "*Sexual health education in the school doesn't address their sexual health problem. Because we teach based on curriculum which doesn't provide all the topics under sexual health" (**In-Depth Interview Biology Teacher**)*

Another teacher was of the view that they are no practical equipment to teach so adolescents are thought in the abstract and it will be difficult to understand. A teacher said: "*the topics of sexual and reproductive health can't be practicalized because the students are thought in abstract. So it will be difficult for them to have enough understanding or knowledge about the topics".* (***In-Depth Interview Science Teacher***)

In the interview, a teacher raised an issue of separating topics of sexual and reproductive health into three different subjects. A teacher said; "*sexual reproductive health topics are kept in three subjects namely social studies, science, and biology"*. (***In-Depth Interview With Social Studies Teacher***)

The issue of sexual health education is being confronted by the cultures and religious beliefs of the respondents: *"some students if you are teaching those topics they see you to be a bad person because of their cultures and religious beliefs". (**In-Depth Interview Science Teacher)***

Some of the teachers are eager to finish the syllabus so they don't want to waste time on these topics. A teacher said: "*if you are teaching some of the topics they want you to go deep and if you follow them you will not cover enough before their exam".(**Science Teacher**)*

Another teacher said that students should be taught detailed comprehensive sexual health: "*nowadays most of the students are sexually active already so they should teach them comprehensive sexual health education"*. (***Counselor In-Depth Interview***)

4.8 How to Handle ASRH in the School

Some of the students and teachers prefer health professionals to handle the teaching of sexual and reproductive health and some of them prefer NGOs that are into adolescent health to handle that: *"I don't know whether our teachers are seducing us or they are teaching us, how can you say that you like sex and you can have sex for two hours nonstop in the class? So I prefer the health professionals to handle it". (**MFGDs1SCH2**)*

A teacher said: "*I think the NGOs who are into the sexual health of adolescents should handle that like savanna signatories, norsac, and camfed"*. (***In-Depth Interview Counselor Sch4***)

A student said: "*I think they should make it a core subject on its own so that we can have the details". (**FFGDs1SCH1**)*

Another student said; "*There should use projectors to project pictures and videos for better understanding. We don't see or feel what they are teaching". (**MFGDs1SCH2**)*

4.9 Challenges to School-Based Sexual Health Education

4.9.1 Cultural practices

Cultural beliefs were seen as a very important challenge to adolescent sexual health education. Because respondents are coming from societies they hold tight to dos and don'ts in their societies. This makes it difficult to discuss sexual health topics.

A student said; "*Our culture does not allow such things to be thought to children. Because we also attach to our cultural beliefs if someone is teaching sexual health you don't feel comfortable". **(MFGDs1SCH2)***

Another respondent said; "*profane words are forbidden for gods of our land". **(FFGDs2SCH2)***

Because of the cultural beliefs of the students some of the teachers fear negation or giving them bad names: "*the cultural beliefs of the students do not give you the chance to express yourself well in those areas and if you do they will tag you with bad names". **(In-Depth Interview Councilor Sch5)***

Nonetheless, some cultures have no problem with that. A respondent confirmed that: *"in my community, we learn more about sexual health than the school. I don't think our culture will have a problem with that". **(MFGDs1SCH2)***

4.9.2 Religious Believes

The findings from FGDs and the interviews show that respondents were having varied views with regard to the influence of religion on adolescent sexual and reproductive health education in schools. The dominant religion in the study area is Islam. A respondent said: "*Our religion teach us that we should not have sex until marriage so we don't have to learn it". **(MFGDs2SCH2)***

Another respondent mentioned clearly that sex education is forbidden: "*Sex education can encourage an individual to have sex which is haram in Islam"*. (***FFGDs1SCH1***)

A teacher said: "*When you are teaching and mention some of the sex organs some of the students will be saying SUBHANALLAAH as if you are a bad person. Meanwhile, some of them are in the act."* ***(In-Depth Interview Science Teacher Sch5)***

A respondent confirmed that a teacher postponed such topics when fasting: "*Our master postpone the topic because it was fasting period and he doesn't want to spoil his fasting". (**FFGDs1SCH2**)*

A teacher said: "*Even though they claim Islam frowns studying sex education which is not true, Islam rather encourages knowing your sexual health".* (***In-Depth Interview Biology Teacher Sch5***)

A teacher said: "*they should be annual training or updates on how to handle adolescent sexual and reproductive health and they should be monitoring and evaluating because SHEP is just an office that we know in our region but we are yet to see them in our school". (**Counselor Sch5***)

4.10 Time and Teaching Aids for Sexual and Reproductive Health Education

Almost all (96.4%) of the respondents in the qualitative findings said that the time allocated for teaching sexual and reproductive health is not enough. In addition, the majority (89%) of the respondents chose textbooks (science, social studies, and biology) as the only teaching aids. Finally, 96.0% of the respondents said that sexual health education was relevant to them.

CHAPTER FIVE

DISCUSSION

5.0 Introduction

The results are summarized in this section. The examination of the data and the goals of the study led to the results. Examining the sexual and reproductive health of senior high school students in the Sagnarigu municipality is the goal of this study. The study's specific objectives included examining students' access to sexual health care services, knowledge, practices and attitudes of teachers and students toward adolescent sexual health, challenges related to school-based sexual health, and strategies for overcoming these challenges. The chapter is organized in accordance with the study's goals.

5.1 Socio-Demographic Characteristics

The majority of participants, with a mean age of 17.67, were between the ages of 17 and 19. In terms of religion, 80.8% of the population was Muslim, while 19.2% was Christian. Regarding the type of school, BCI had the highest proportion of responses (90) at 23.7%. Seventy percent of the responses were boarders, while thirty percent were day students. There were 50.2% female responders and 49.8% male respondents.

5.2 Knowledge, Attitudes, And Practices Of Adolescents

The majority of teenagers have a reasonable understanding of only physical changes that occur during adolescence, but not psychological changes. This is not unexpected considering that studies have shown that discussions concerning physical bodily changes frequently occur across a range of subject areas, such as Biology and Social Science, as well as occasionally outside of the classroom. But it's interesting since knowledge of pregnancy was quite limited and severely distorted by myths.

More than half (53%) of respondents were unaware that a female may become pregnant after having unprotected sex with a male if the boy withdraws, and seventy-four percent of respondents (74.4%) were uninformed that a girl can become pregnant after having unprotected intercourse with a male if the boy withdraws. FDGs found that young people's views of how pregnancy happens are complicated by misinformation. The manner or posture assumed during sexual activity has been attributed to the presence of a pregnancy. These results parallel those reported elsewhere. Williamson et al, did a meta-analysis of various studies from developing countries, many of which indicated erroneous views of pregnancy risk among young women, inadequate awareness of modern contraceptives, and widespread misunderstandings of how to use them correctly. According to FDG participants, a woman or young girl could only become pregnant in the supine position during sexual activity. They believed that pregnancy was unlikely when the "bend down and take" technique was performed when having sex. These results correspond with those of Awusabo-Asare et al. (2006), and the majority of young people are ignorant of the process of conception, claims van der Geugten (2017). The majority of responders thought that standing during intercourse hindered conception and that the withdrawal process prevented pregnancy. Most of respondents (91.6%) are aware of the male condom as a contraceptive, but just 21.1% are aware of injectable (DEPO) contraception. Overall, 58.1% reported knowledge of contraception. The result is therefore not unexpected, especially in light of the ABC's widespread campaign against HIV infection. More than 90% of young people, with the condom being the most well-known, have heard of at least one contemporary contraceptive, according to research by Awusabu-Asare et al. (2006). However, respondents were unfamiliar with the other modern and traditional treatments, including Tubal Ligation, Vasectomy, and Natural methods. This finding is comparable to those made by Yidana et al. (2015) who found that only 3.3% and 3.8% of young people, respectively, were aware of tubal ligation and vasectomy, and to those

made by Hagan et al. (2012) who also found that young people were not well-versed in diaphragm, intrauterine device (IUD), and sterilization (male/female). This data supports Apanga's (2014) conclusion that adolescents in rural Ghana have little or no understanding about contraceptives.

The research presents a series of questions regarding adolescents' negative or positive attitudes toward menstruation, pregnancy, and contraception. Beginning with their first menstruation, the majority of adolescents (51.5%) felt fear, while 23% felt shy. 21.6% felt normal and finally 3.1% felt humiliated.

In addition, respondents were questioned if adolescents who are sexually active yet unmarried should have access to contraceptives. More than half of the teens (63.4%) accept that 57% of them may use contraception in the future. Their contrasting views on the use of contraceptives may be to blame for the discrepancy in their responses. Studies have shown a connection between teenage usage of contraception and a generalized sensation of embarrassment. The "Sexual Health Experiences of Adolescents in Three Ghanaian regions" study by Glover et al. from 2003 found that shyness and shame over buying contraceptives worked as a significant barrier to contraceptive usage. Moreover, Hagan et al, revealed that 40% of respondents thought teenagers who use contraception were terrible boys and girls (Hagan et al., 2012). Therefore, the fact that less than a third of respondents in our study had intentions to use contraception may have been influenced by the fear of appearing promiscuous.

Male condoms were preferred above the pill and injection by the 69.7% of respondents who intended to use contraception. Moreover, the findings showed that compared to men, women preferred injectables and tablets more. This outcome is in line with previous research's findings (ACDEP 2008,

Enuameh et al, 2015). Given that society disapproves of teenage sexual behavior, literature suggests that the problem may be related to the discretion with which these tactics are used.

41% of respondents stated they would discontinue their education and keep the pregnancy, while 30% said they would get an abortion and continue their education. The remaining respondents did not know what they would do. Due to preconceived notions, respondents will not feel comfortable continuing in school while pregnant and will not seek an abortion due to cultural or religious views. FGDs indicate that local concoctions and hard drugs are used to terminate adolescent pregnancies, despite the fact that the health facility was selected as the site where adolescents obtain abortions.

Both Christianity and Islam shared the view that having sex before marriage was a transgression against God. According to individuals who did not plan to utilize contraception, and they were obligated to refrain from sexual activity until marriage. Contrary to this abstinence ethic, approximately 50% of survey participants (respondents) had ever engaged in sexual activity. This shows that the majority of senior high school students are sexually active despite a small majority claiming they are not. According to the FGDs, the majority of young people are sexually active, and 9% of respondents have ever given birth to a girl or impregnated her. This finding is in line with earlier studies conducted .In Ghana; researchers discovered that teenagers are able to have sex (Ogbada 2013 and Awusabu Asare et al. 2006). In a cross-sectional study of 826 in-school youngsters to look at premarital sexual behaviors and it's related in North West Ethiopia, authors Bogale and Seme found that premature sexual debut increases the risk of infection with HIV and other STIs among teenagers.

Seventy-three percent of teenagers exhibit STI symptoms, according to a study of all STI symptoms ever reported. This is quite dangerous, as over half of respondents had ever experienced STI

symptoms. The male condom was utilized the most (15%), while the female condom was utilized the least (1.8%), followed by pills and emergency contraceptives (2.9% and 3.9%), and the second most utilized technique was injectable (4.2%). Because 25.4% of the 49% of sexually active students do not utilize contraception, it is abundantly clear that respondents participate in significant levels of risky sexual behavior. In other words, school-based contraception use among sexually active adolescents is not encouraging or is very low. The majority of first sexual encounters between teens are reportedly hazardous and unplanned, increasing the risk of Infections and unexpected pregnancy. A few students admitted to having many partners for sex. (Dave et al., 2013; Kumar et al., 2017). Infertility and disruption of the menstrual cycle were cited as reasons for some respondents, particularly women, not to use particular contemporary contraceptives due to their potential negative effects. Respondents' attitudes of contraceptives, particularly among girls, appear to have been negatively influenced by information learned from society about the side effects of methods like tablets and injectables. Several respondents, according to discussions in a focus group, thought that these operations were reserved for married women and that they were consequently off-limits to them. This supports the findings of Williamson et al. (2009) and Hagan et al. (2012), who both came to the same conclusions. Condom use is regarded as more desired and accessible than hormonal contraception, yet in this study, an adolescent girl does not perceive any hurdles to use. In the Williamson et al. (2009) study, the association between condom use and disease, promiscuity, and increased male control led to a decline in female condom use.

Low contraceptive use has been linked to both the health system's capacity issues and the organizational framework that supports the delivery of these services. Inadequate information to make informed decisions regarding contraceptives, resistance from male partners, and risk consciousness (the lower the risk perception to STIs and pregnancy, the lower the usage of

contraceptives) have all been linked to this problem (Hagan et al., 2012).The rates of contraceptive usage among married women aged 20 to 24 and those aged 15 to 19 in all of sub-Saharan Africa are still quite low (UNFPA, 2012)

For adolescent condom use to be prevalent, comfort with carrying condoms and their availability are crucial factors. Initiatives in sexual and reproductive health that seek to boost condom usage may succeed if they provide guidance as how to buy condoms from retail stores and carry them covertly. Especially among young individuals who participate in high-risk sexual behavior, programs that encourage condom distribution for free in public settings like toilets are more likely to reduce obstacles to condom usage (Krugu et al., 2016).The non-use of contraceptives was also influenced by respondents' misperceptions and insufficient awareness of the reproductive process. The posture that couples used during sexual activity was linked to pregnancy; it was thought that pregnancy was only likely when lovers adopted the missionary position. This misunderstanding of conception and unfavorable views against the use of contraception serve as a stark reminder of the necessity for comprehensive sex education to provide individuals with the knowledge, values, and attitudes that will allow them to make the most appropriate choices.

5.3 Access to Sexual and Reproductive Health Services?

Access to SRH was difficult for responders living in the boarding house due to the distance and expense of traveling to a health facility for medical care. Respondents consequently advocated for the development of on-campus clinics where they could conveniently get the necessary care.

The respondents knew where to obtain health care, but the cost was prohibitive. One may wonder what the National Health Insurance Program is for. Our economically disadvantaged adolescents still struggle to pay for care and treatment for various sexual health-related disorders, even though the

National Health Insurance System reduces the cost of some medical procedures. Most of the time, patients in these locations spend the whole cost of medical care out of pocket. It is vital to provide screening and treatment for adolescents in and out of school, as well as to subsidize the cost of sexual health treatments. This might protect persons who engage in risky sexual practices from suffering permanent injury.

The opinions of parents and medical experts were shown to be a barrier to receiving sexual health treatments in FGDs with students. Most health institutions have a culture that deters young people from seeking the services they need. The critical mindset of some medical practitioners made matters worse. This conclusion is consistent with those of several investigations. For example, Tilson et al. (2004) demonstrated that the absence of privacy in a clinic served as a deterrent for young individuals seeking treatment for STIs. According to this, Kumi-Kyereme et al. (2014) point out that several methods used by healthcare professionals in the treating of STIs are in accordance with the Ghana Health Service's policy for treating STIs. However, they also acknowledge that healthcare providers' judgmental attitudes and rejection of patients who seek STI treatment put a barrier between the provider and the patient. For instance, the gonorrhea treatment procedure demands that the patient's spouse be present for the examination and treatments.

Participants indicated that individuals don't always trust medical personnel, especially women, to keep sexual health problems in addition to the judgmental attitudes and lack of privacy at healthcare facilities. Especially among student parents, female healthcare providers were perceived as friendly and disclosing personal information.

Also, it was shown that adolescent’s access to healthcare services is influenced by the gender of the healthcare provider. Participants in the FGD stated that they preferred receiving medical attention

from people of the same gender. Male respondents in particular made the case for this, since they frequently find it awkward to communicate with female healthcare providers and are more prone to revise their accounts and make new complaints when receiving care from a woman.

Health care facilities must be youth-friendly in order to be more accessible to young people. Their surroundings must be appropriate and welcoming. As a result, special spaces and periods must be set up for young customers. Moreover, youth-friendly services must meet the demands of its customers and include retention strategies.

The most important element for creating youth-friendly services is usually believed to be staffs that have been taught to interact with young people professionally and sympathetically. Staff members must be knowledgeable about the physiology and development of adolescents as well as age- and maturity-appropriate medical treatments. Also, they must be able to communicate well with others so that teenagers may express their wants and worries. Young customers have been reported to feel better at ease discussing delicate subjects with service personnel of the same gender or age (Senderowitz, 1999).

Teenagers place a high value on privacy and confidentiality, thus these rights must be maintained. The nurse would inform their moms that they went to the clinic for RH treatment, despite the fact that adolescents must be reassured that their private and sensitive concerns won't be shared with others, including their parents, research has shown that this is a common fear among them (Senderowitz, 1999). In keeping with earlier research (Kumi-Kyere et al., 2014; Mbonile et al., 2008), it was found that parental views were often unsupportive when a child needed sexual health care. However according to this study, moms were perceived as having greater compassion than dads when it came to coping with problems related to sexual health, such as unintended pregnancies.

Teachers and students both agreed that it is crucial to provide students with the knowledge, attitudes, and values they need to make educated decisions regarding their sexual health in the classroom. Yet, the study's findings show that the senior high school program's sexual health education component is far from complete. Integrated science, which places a focus on intellectual inquiry, and religious and moral education, whose discussion of the reproductive system is constrained by the idea of sin, is the two disciplines that now provide teaching on the reproductive system. Teachers disagree with include comprehensive abortion and the use of contraception in school curricula despite acknowledging the necessity for sexual health education for teenagers. The teachers gave students who needed readings on biology-related pubertal difficulties priority. As sexual health education is not a subject that can be tested, instructors and students are more focused on topics that will be on the final WASSCE. Yet, according to a number of studies (Kirby et al., 2007, Rijsdijk et al., 2011, and others), interactive, and participatory learning promotes the development of the right values and attitudes by allowing students to examine and shape their own values and attitudes (IPPF, 2009). It's possible that students in Biology, Social Studies, and Integrated Science are not receiving a thorough education in the full spectrum of knowledge, abilities, and beliefs required for adolescents to exercise their sexual and reproductive rights and make decisions regarding their health and sexuality.

The findings also demonstrate challenges with effective class time allocation and the suitability of the classroom environment for obtaining the intended outcomes for the existing way of teaching sexual health in senior high schools. Programs intended to change attitudes and behaviors must not only be theoretical but also contain effective and thorough counseling components that demonstrate they are responsive to the real-world problems young people face when facing their sexual and behavioral challenges, according to studies (Aransiola et al., 2013, Kirby, 2002).Counselors can help kids with personal issues that they are unable to share in the classroom in this kind of setting.

The belief that youth who are not sexually active may be drawn to experiment with sex once they have information about sex has been proven to be the driving force behind teachers' negative attitudes regarding comprehensive sexual health education. It was thought that informing teenagers about contraceptives and where to get them would entice them to have sexual relations. Participants in the FGD discussed how religious leaders oppose sexual and reproductive health education for unmarried youth by using passages from the Bible. But, they concede that things have already gotten out of hand, with many teenagers having extramarital affairs even in religious settings. Despite this, they insist that giving unmarried youth the necessary knowledge about contraception may accelerate the loss of moral principles.

Instructors feared criticism for teaching about sexuality in a setting where sex and sexuality discussions are considered taboo or "haram." While discussing sexual organs and other sexually-related topics, teachers frequently utilize odd euphemisms that, in the majority of situations, leave pupils more puzzled. Under such situations, students find it difficult to ask questions for fear of being perceived as disrespectful or obnoxious. So, the reluctance to teaching certain delicate themes in sexual health is based on the desire of educators to safeguard their image.

Since that sexuality is not always positive, the study Iyaniwura (2004) suggests that teachers be taught the value of talking to young people about sexual issues. She also suggests that educators take courses in effective communication so they are better prepared to teach sex education.

The importance of sex education to children's health should be explained to parents and other community members as a component of the implementation of sexual and reproductive health education programs. This would stop parents from accusing or yelling at school officials for talking about sexual issues with their wards..

It is hardly surprising that the majority of students (90.5%) felt that the sexual health education they received in class was inadequate. The teachers lacked the self-assurance required to run the program effectively. The Ghanaian health service and non-governmental organizations were preferred by students as the source of Comprehensive Sexual and Reproductive Health Education in classrooms. The results showed that students did not believe that sexual health education in schools received enough attention. Academic success was prioritized over personal, health, and social growth. Examinable disciplines and exam-preparation techniques received more attention.

5.4 Challenges of Sexual and Reproductive Health in Schools

Discussions on sexual and reproductive health with unmarried youth are discouraged in Ghana and many other African countries. Because of the sensitivity surrounding such topics, parents, family members, teachers, and society as a whole are required to provide adolescents relatively little information on sexuality. The study shows that it was challenging for instructors to speak freely on sexual health due to cultural and religious barriers. Because to these restrictions, educators tended to place a strong emphasis on the moral aspects of sexuality and sex, opposing premarital sex, the use of contraception, and abortion on moral grounds.

The ethically delicate nature of sexuality was stated as a reason why teachers avoided discussing it with students out of concern that they would receive negative feedback from parents for bringing up sexuality in a context where such subjects are forbidden or "haram." Without the support of colleagues, communities, and school administration, teachers are unable to provide CSE in an efficient manner. Its execution is facilitated by a school policy on sexual education that is clearly stated (Schutte et al., 2013). It is challenging for teachers to give children a quality CSE education when school policies and social support from communities are absent. Instructors were rumored to be bashful as well, which frequently resulted in the usage of euphemisms when referring to sexual

organs and other matters related to sexuality, leaving students further bewildered because they didn't understand these euphemisms. Under these circumstances, students find it challenging to ask for further answers because of concern that they would be seen as pampered or promiscuous.

Teachers who act as instructors and role models must be knowledgeable, confident, and at ease while giving comprehensive sexual and reproductive health education if they are to provide the teens in their care with vital sexual and reproductive health knowledge and skills.

Teachers need to be taught in participatory teaching methods that allow them to approach sensitive subjects without hesitation, in a non-judgmental and rights-based manner if they are to be competent and self-assured. The provision of high-quality education depends on the growth and preservation of teachers' ability and effectiveness (UNESCO, 2005). The use of euphemisms by teachers while addressing sexuality in class is a sign of insufficient sex education in Ghanaian schools and a lack of teacher training. The failure of society and educators to openly discuss sexuality with teenagers has negative effects on society as a whole. Inadequate sexuality and health education would prevent teenagers from making educated decisions about their sexuality.

According to studies, a well-structured curriculum is necessary for the effective implementation of sex education. The curriculum offers implementation advice, ensuring the program's rigor and coherence. In contrast to earlier research (Schutte et al., 2014; Renju et al., 2009), This study revealed a dearth of teaching resources and inadequate time for lessons on sexual health, in contrast to that of which sex education was taught according to a curriculum, other supporting teaching materials, and at a set time.

Despite the respondents' requests for interactive instructional resources that offer real-world experiences, it seemed that there were only the textbooks for Integrated Science, Social Studies, and

Biology in the classrooms. Successful sexual education programs must also have a strong curriculum and excellent execution. Only when programs are delivered with the proper fullness (quantity of the program) and faithfulness can positive health results be achieved (implementation according to program requirements). The only period of time when students are taught about their sexuality is during Science class, despite the fact that the present study did not specify a precise period for this lesson because sexuality-related issues only sometimes emerge. Also, there was agreement among FGD participants that certain days and times should be set out for teaching sex education so that students may pick up the skills, knowledge, attitudes, and values needed to make wise decisions. Schedules for sex education should include specific times to guarantee that the programs are delivered accurately and completely.

CHAPTER SIX

CONCLUSION AND RECOMMENDATIONS

6.1 Conclusion

This study's objective is to evaluate sexual and reproductive health of teenagers enrolled in senior high schools in the Sagnarigu municipality. The majority of students are aware of the changes that occur throughout puberty, but many are unsure of the psychological changes that take place at this time. Throughout adolescence, physical changes are virtually often noticed, although psychological changes are less well recognize despite the fact that participants knew when and how conception happens. The study found that teenagers had a variety of false beliefs about how pregnancy might happen. Most of them connected pregnancy to the woman's posture during sexual activity. A lady becoming pregnant and adopting a missionary stance were related.

In spite of having a high degree of knowledge about contraceptives, just a tiny fraction of teenagers in this study admitted to using them. It showed that the use of contemporary contraceptives was hindered by religious beliefs and concerns about their harmful side effects.

Respondents have indicated unhappiness with the existing sexuality education they get in school, despite their substantial understanding of the bodily changes linked with adolescence and contraceptives.

The survey also uncovered the present obstacles to discussing sexuality problems with students in the classroom. Instructors are unable to freely communicate with students on sexuality-related matters. Students, on the other hand, are fearful of being labeled as promiscuous if they openly discuss or inquire about sexuality. It has been said that cultural and religious beliefs interfere with the learning and instruction of sexuality education in schools. Also, it was discovered that schools lacked the

instructional and learning tools required to offer sex education. There are no other educational materials for teenagers outside the Integrated Science, Biology, and Social Studies textbooks. In actuality, these young people lack the information, abilities, and attitudes required to make choices about their sexual lives.

6.2 Recommendations

5.6.1 Recommendation for a National Sexual and Reproductive Health Policy

Programs for sexual and reproductive health should be monitored and assessed to ensure that high standards and uniformity are met in SHS. There are well-organized policies that must be put into practice that exist on paper. In order to get their support for such a program, parents must be trained or educated on how to mentor or instruct their kids in sexual health education.

Senior high school campuses need to set up youth-friendly clinics to handle issues with sexual and reproductive health. If this were done, students would find it handy and pleasant to go to these clinics for medical treatment. Teachers must possess the necessary credentials to teach the topic in order for sexual and reproductive health education programs to be effectively implemented and overseen within the school curriculum. These individuals must also receive this training in order to develop the curriculum, train instructors, and support and manage instructors.

Religious and traditional leaders ought to be enlisted and given the necessary training so they can contribute significantly to the spread of SRH knowledge. The age of marriage should be decreased, and maybe combined with the age at which adolescent's first sexual activity.

5.6.2 Guidelines for NGOs in Health

The majority of teenagers are adversely encouraged to participate in risky sexual activities. To create interventions to advice adolescents and promote SRH, the civil society working on SRH must engage in research.

5.6.3 Guidelines for Sexual Health Education in the Classroom

The availability of capable, excellent teaching and learning tools that meet the requirements of teenagers is also essential. Less text should be used in these items, and they should be interactive and realistic. Visual materials could contain illustrations of the male and female reproductive systems as well as photos and films showcasing the signs of sexually transmitted infections (STIs), including genital warts, gonorrhea, and syphilis. This would make it easier for pupils to comprehend the lessons being taught and the negative effects of engaging in unsafe sexual activity. According to the survey, there is limited place for female academics because men integrated science teachers are generally in charge of teaching teenagers about their sexuality. Therefore, deliberate efforts should be made to include female teachers in the sexuality education curriculum, especially when it comes to teaching about the menstrual cycle, contraception, and issues connected to conception. Instructors must also embrace an interactive, participatory, and student-centered method of instruction. Without feeling intimidated, students must be able to participate in class discussions and ask questions. Also, schools must to offer more chances for teenagers to get sexuality and relationship education from experts.

5.6.4 Suggestions for Expert Advancement

Implement a national policy requiring pre-service teachers to instruct teenagers on sexual and reproductive health. This training would enhance their interpersonal skills so that they could

communicate effectively with adolescents. These qualifications would allow them to become excellent sexuality educators for teenagers.

5.6.5 Recommendation for Further Research

This survey indicated that adolescents are dissatisfied with the sexual education offered in schools. Future studies should investigate the sexuality-related obstacles faced by young individuals. Future studies should assess how parents feel about and support sexual education in schools in the Sagnarigu municipality.

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APPENDIX

QUESTIONNAIRES

ADOLESCENT SEXUAL AND REPRODUCTIVE HEALTH AMONG SENIOR HIGH SCHOOLS IN THE SAGNARIGU DISTRICT

Dear Research Participant,

The aim of this study is to analyze Adolescent Sexual and Reproductive Health among Senior High Schools in the Sagnarigu District; it is a study in partial fulfillment for the award of a Master of Philosophy (Philosophy) degree at the University for Development Studies (UDS), Tamale. Thus, the information obtained through this questionnaire is for academic purposes only. Please be assured that your participation in this project is completely voluntary and your responses would be treated with utmost confidentiality. Your agreement to respond to these questions implies your consent to participate in this research process. Thank you for your cooperation and understanding.

SOCIO-DEMOGRAPHIC DATA

1. Sex 1. Male 2. Female

2. Age …… (Years)

3. Religion: …… 1.Muslim 2. Christian (catholic) 3. Christian (protestant)

3. Traditional religion 5. Others (specify)……..

4. Type of school: ……

5. Status of student 1. Day student 2. Boarder

Students' Sexual Health Knowledge and Practices

6. Can a girl get pregnant even before her first menses?1. Yes 2. No 3. Don't know

7. Can a girl who has experienced her menarche get pregnant the very first time she has unprotected sex?1. Yes 2. No 3. Don't know

8. In the process of unprotected sexual intercourse between a boy and a girl, is it possible for the girl to get pregnant if the boy withdraws before ejaculation? 1. Yes 2. No 3. Don't know

Do you know of any contraceptive?

1. Yes 2. No

9. Only physical changes occurs but not psychological changes during adolescence

1. Yes

2. No

3. Not Sure

10. Menstrual cycle more than once in a month is not a problem

Yes

No

Not Sure

11. Unintended pregnancy might cause abortion

1. Yes

2. No

3. Not Sure

12. A birth to the conception of interval at least two years can reduce the risk of maternal health

1. Yes

2. No

3. Not Sure

The table below contains a list of contraceptives. Answer question 13 and 14. Then

Proceed to answer question 15 if your answer to 14 is YES.

LIST OF METHODS	Q.13) Have you ever heard of method?	Q.14 Have you or your partner ever used method	Q.15 The last time you used this method from where did you obtain it?
PILL: Women should take every day	1. Yes 2. no	1. Yes 2. no	……
IUD: a coil or loop placed in the womb by a doctor or nurse	1. Yes 2. no	1. Yes 2. no	……

INJECTABLE (DEPO): injection which prevents women from becoming pregnant	1. Yes 2. no	1. Yes 2. no	……
DIAPHRAGM/FOAM TABLETS/JELLY: women place insert before sex	1. Yes 2. no	1. Yes 2. no	……
FEMALE CONDOM: rubber sheath women insert in the vagina before sex	1. Yes 2. no	1. Yes 2. no	……..
MALE CONDOM: rubber sheath men wear on the penis during sexual intercourse	1. Yes 2. no	1. Yes 2. no	……
NORPLANT (JEDELLE): small rods placed under the skin of the left upper arm	1. Yes 2. no	1. Yes 2. no	……

EMERGENCY CONTRACEPTIVE: Pill taken by women within 72 hours after unprotected sex	1. Yes 2. no	1. Yes 2. no	……
NATURAL METHOD; Billings' method, menstrual cycle method	1. Yes 2. no	1. Yes 2. no	……
WITHDRAWAL METHOD: withdrawal of the penis before ejaculation	1. Yes 2. no	1. Yes 2. no	……

16. Among the methods of contraception you know, which method prevents both sexually transmitted infections and pregnancy? ……

17. Should sexually active unmarried young people be allowed to have access to contraceptives?

1. Yes 2. No

18. Explain your answer to 20 …….....

……

……

……

……

Young people have sex for various reasons - love, because they feel like it, because they are forced or tricked.

19. Have you ever had sex?

1. Yes 2. No

20. If you ever had sex, how old were you?

…….. Years

21. Have you ever been pregnant or impregnated a girl?

1. Yes 2. No

22. How old were you when you became pregnant or impregnated a girl?

…… Years

23. What would you do if you were pregnant or your partner was pregnant?

1. Stop schooling and keep the pregnancy

2. Get an abortion and continue schooling

3. Don't know

24. Do you know what girls sometimes use to cause abortion? If you do, name some of these materials.

……

……

25. If you were pregnant or impregnated a girl and wanted to get an abortion where would you go?

1. Go to health facility 2. Go to drug store for drugs 3. Go to private service provider

3. Go for local medicine 4. Other (specify)……

26. Would you ever consider using any contraceptive method?

1. Yes 2. No

27. If yes, which of the contraceptive methods would you prefer to use?

.....

28. If no, why wouldn't you want to ever use a contraceptive?……

……

……

……..

29. From which of the following sources can you comfortable request for a contraceptive if you want one?

1. Drug store

2. Health facility

3. Local community seller

4. Peer educators

5. Friends

6. Other (specify)…….

30. Have you ever experienced any of the following symptoms in the table below? Tick (√)

As many as apply

SIGN	YES	NO
White (Candida)		
Painful urination		
Swelling of the scrotum(boys only)		
Itching around the genitals		
Vaginal discharge (girls only)		
Discharge from the penis(boys only		

31. If you have ever experienced any of these signs and symptoms what did you do?

1. Did not seek for treatment 3. Went to the health facility

2. Treated myself with local medicine 4. Went to drug store for treatment

32. What would you do if you start experiencing symptoms of STIs?

1. Go to the health facility for treatment 3. Leave it to go on its own

2. Go to the drug store for medicine 4. Treat it with local medicines

The following questions are to determine whether you have received adequate information on sexual health, STI and HIV/AIDS from school.

33. In the table below, provide information about whether you agree or disagree on the statements given. Tick (√) **Agree, strongly agree, undecided, disagree or strongly disagree**.

ITEM	Agree	Strongly Agree	Undecided	Disagree	Strongly Disagree
I have received information on emotional changes related to adolescent development					
I have received information on the physical changes that occur during adolescence					
I have information on where STIs and HIV counseling and testing services are provided.					
I have had information on various types of contraceptives.					

I have received information on how to effectively use some methods of contraception.					
I have received information on the side effects of some contraceptives					
I have received information on where to acquire contraceptives.					
I have receive information on the consequences of unplanned pregnancy on my health.					
Have been educated on the need to refuse unprotected sex.					
I have been educated on the effects of negative peer pressure on risky sexual behavior.					

I am satisfied with what I am taught in sexual health Education.					

34. The following questions seek your assessment of your teachers regarding the teaching of sexual and reproductive health.

To what extent do you agree with the following statements?

Item	Agree	Strongly Agree	Undecided	Disagree	Strongly Disagree
Teachers in this school take teaching sexual health education seriously					
Teachers motivated me to learn about sexual health					
The teacher motivated me access valid information and sexual health services.					
The teaching strategies used in school helped me learn how to practice safer sex					

35. Which of the following teaching aids are used during sexual health education? (tick

all that apply)

1. Audiotapes 2. Textbooks

3. Newspapers and magazines 4. Video tapes

5. Pregnancy, HIV/AIDS, and STIs prevention materials such as posters, pamphlets, pictures.

36. Do you think the time allocated for teaching sex education is enough for you?

1. Yes 2. No

37. Do you think sex education is relevant to you as a young person?

1. Yes 2. No

38. Explain your answer to the above question

……

……

……

IN-DEPTH INTERVIEW GUIDE FOR TEACHERS

1. As we live in an era of technological evolution with so much social media such as facebook, whatsapp, viber, etc. how would you describe the sexual behavior of your students?

Probe for

- Whether (students) are sexually active
- Cases of girls becoming pregnant in this school

2. In your opinion do you think a girl can get pregnant even before her first menses?

3. In the process of unprotected sexual intercourse between a boy and a girl, do you think it is possible for the girl to get pregnant if the boy withdraws before ejaculation?

4. In your view does sexual health education program address all that students need to know about their sexuality?

What areas of young people's sexual health are taught as part of sexual health education?

(Probe if it includes; understanding of sexuality, contraceptives, and abortion. Development of skills related to sexual relationships; negotiation and assertive skills).

5. From your experience as a teacher, how do you think sexual and reproductive health education program should be organized? Should it include the details such as the menstrual cycle and pregnancy, contraceptive usage and abortion services?

6. Have you been given the necessary training to teach students on their sexual and reproductive health?

7. How would you describe students' attitude to sexual and reproductive health lessons?

8. What are some of the challenges associated with sexual and reproductive health in the school?

Probe for

- Allocated time for teaching the subject
- Teaching aids
- Social and cultural
- religious factors

FOCUS GROUP DISCUSSION FOR STUDENTS

1. In your view;
    - What is sexual and reproductive health?
    - Does sexual health education program address all that you need to know about your sexual and reproductive health as an adolescent?

2. What information do you wish to know about your sexual and reproductive health that you are currently not being taught? Why would you consider that information important?

3. Apart from what you receive from school, what other alternative sources do you

get information from in relation to your sexual health? (Probe for whether they receive sexual health education from health workers or NGOs)

4. Considering the current methods of teaching sexual and reproductive health in this school, how do you think it should be done to meet your expectations?

5. How would comprehensive sexual and reproductive health education have impact on your attitudes to sexual health? (Probe if it would help them delay sex till marriage, empowers them to use contraceptives if sexually active, seek screening and early treatment for STIs)

6. How would you describe teachers' attitude to teaching sexual and reproductive health?

7. As a second cycle institution, guidance and counseling services are very important for the emotional health of the students. How can you describe the nature of providing these services in your school especially in relation to your sexual health?

8. Access to information on the sexual health has been a challenge to most adolescent.

Do you have access to the appropriate sexual health information and sexual health care services as an adolescent? (Financial, geographical, attitude of providers and parents)

9. What are the barriers that make it difficult for you to access information and sexual health care services?

10. In your opinion what are some of the challenges that make teaching of sexual and reproductive health in schools difficult?

- Social and cultural barriers
- Religious barriers
- Teaching aids

How can these challenges be addressed to improve the teaching of sexual and reproductive health is schools?

Informed Consent: This is the procedure by which a patient (participant) consents to receive treatment or take part in a trial or study after learning about the goals, advantages, and potential hazards of the intervention (study) (American Medical Association, n.d.).

The participants received comprehensive information about the research via the consent form. These include details about the researcher, the goal of the study, the methodology, the opportunity to participate voluntarily and the freedom to stop at any moment without facing consequences. It also described the use of pseudonyms to safeguard secrecy, how to safely store notes, possible hazards and how to reduce them, and the main researcher's contact details. No one was forced or tricked into taking part in the research; instead, participants gave their verbal agreement after receiving a thorough explanation.

- **Confidentiality**: The notes made during the interview were only accessible to the researcher due to the confidentiality of the information collected from the participants. Nothing individually identifiable was recorded. This was required to ensure that, in the unlikely case of an unintentional security compromise, replies could not be linked to individual participants. Furthermore, the identities that are used to publish the findings are pseudonyms, or made-up names, that were given to participants in order to safeguard their identity.
- **Self-Determination**: No one was forced or compelled to take part in the study or provide the researcher any information. They were free to take part in the discussion and to choose whether or not to respond to any of the questions posed. Their choices and views were honored.