KWAME NKRUMAH UNIVERSITY OF SCIENCE AND TECHNOLOGY

KUMASI, GHANA

COLLEGE OF HEALTH SCIENCES

SCHOOL OF PUBLIC HEALTH

DEPARTMENT OF POPULATION, FAMILY AND REPRODUCTIVE HEALTH

SEXUAL BEHAVIOUR AND CONTRACEPTIVE KNOWLEDGE AND USE AMONG FEMALE ADOLESCENTS IN SENIOR HIGH SCHOOL IN MANHYIA SUBMETRO, KUMASI

BY

ARTHUR MLEPH CHAMPITI (BSc. NURSING)

OCTOBER 2015

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A THESIS SUBMITTED TO THE DEPARTMENT OF POPULATION, FAMILY AND REPRODUCTIVE HEALTH,
COLLEGE OF HEALTH SCIENCES, SCHOOL OF PUBLIC HEALTH, IN PARTIAL FULFILMENT OF THE REQUIREMENTS FOR THE DEGREE OF MASTER OF PUBLIC HEALTH IN POPULATION, FAMILY & REPRODUCTIVE HEALTH

OCTOBER, 2015

DECLARATION

I hereby do declare that except for references to other people's work which has been duly acknowledged, this piece of work is my own composition and neither in whole nor in part has this work been presented for the award of a degree in this university or elsewhere.

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HEAD OF DEPARTMENT

SIGNATURE ……..DATE……..

DEDICATION

I dedicate this work to God Almighty, my wife Rachel, my daughter Grace, my mother Medicy Champiti, sisters Rose, Christabel, Tenganawo, Maud and brothers; Clifford, Ngwame and Wanangwa for their support and endurance during the programme.

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This work will never have come to be if not for my supervisor, Dr Sam Newton who guided and gave me timely corrections for me to complete the work on time. I am really grateful. I would also wish to thank the Dean of the School of Public, Dr Easmon Otupiri and the entire team of the school for seeing me through the whole process.

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DEFINITION OF TERMS

- **Adolescent**: Transition from childhood to adulthood. Age group 10-19 years
- **Contraception:** interventions that are done to a woman to prevent her from getting pregnant
- **Sexual Behaviour:** activities that result in reproduction and stimulation of sexual organs
- **Risky Sexual Behaviour:** sexual behaviour that may result to contracting of sexually transmitted infections or unwanted pregnancy

LIST OF ABREVIATIONS AND ACRONYMS

AOR	-	Adjusted Odds Ratio
CI	-	Confidence Interval
CICs	-	Combined Injectable Contraceptives
COCs	-	Combined Oral Contraceptives
CPR	-	Contraceptive Prevalence Rate
DESA	-	Department of Economic and Social Affairs
FP2020	-	Family Planning 2020
GDHS	-	Ghana Demographic and Health Survey
GHS	-	Ghana Health Service
HIV	-	Human Immune Virus
IUCD	-	Intra Uterine Contraceptive Device
LAM	-	Lactation Amenorrhea Method
LSFP	-	London Summit on Family Planning
MDGs	-	Millennium Development Goals
NGO	-	Non-Governmental Organization
MOH	-	Ministry of Health
OR	-	Odds Ratio
P value	-	Probability value
SHS	-	Senior High School
STI	-	Sexually Transmitted Infection
UNFPA	-	United Nation Population Fund
WHO	-	World Health Organization

ABSTRACT

Introduction: Unsafe sexual practices among school girls is one of the challenges in this 21st century. They are at risk of contracting sexually transmitted infections and getting unwanted pregnancies that may result in unsafe abortion. In view of this, the study was conducted to assess the sexual behaviors, contraceptive knowledge and use among Senior High School girls.

Method: this was a descriptive cross sectional study carried out among 240 Senior High School Girls from a purposively selected schools in Manhyia Sub Metro, in Kumasi Ghana. A Self-administered structured questionnaire was given to randomly selected girls in the chosen schools

Results: the findings of the study reported 48.7% of the girls having had a boyfriend and 30.8% had ever had sex. Majority (62.1%) had knowledge of at least three methods of contraceptives. The recommended the condom as the method to be used by young people. The findings also showed that 19% of the students in the study used contraceptives. Age and ethnicity were found to be related to contraceptive use (OR=0.013 and 0.002 respectively). The unadjusted effect on risky behaviors showed that students who do not go to clubs (OR=0.25; 95% CI=0.13 – 0.49), cinema halls (OR=0.27; 95% CI=0.13 – 0.56), and do not drink alcohol (OR=0.22; 95% CI=0.09 – 0.52) had a lower odds of using a contraceptive method compared with those who do otherwise.

Conclusion: The school girls in the area are sexually active. They have knowledge of contraceptives though they recommend only the use of condoms. A few of the sexually active girls use contraceptives. There is need to teach the girls about the other contraceptive methods that they can use together with the condoms. Authorities should take the responsibility to orient the girls on behavior change and contraceptive use.

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CHAPTER 1

INTRODUCTION

1.1 BACKGROUND INFORMATION

Adolescence is the period of transition between childhood and adult-hood. It starts with puberty, which is a process of physical, psychological and emotional development triggered by a cascade of endocrine changes that lead to sexual maturation and reproductive capability. In girls, a key marker of puberty is menarche which is the first menstruation, but there is no such clear marker in boys (DESA,
2013)

Adolescent health is currently one of the health priorities globally. It is a public health concern. Unsafe sexual behaviors among adolescents leads to pregnancies that are usually unwanted and consequently result in unsafe abortions. The other adverse effect is contracting Sexually Transmitted Infections including HIV and AIDS (Chandra-Mouli et al., 2014, & Tripp and Viner, 2005) Promotion of adolescent health not only improves their health but in a broader prospective it improves the development of a nation as it improves the status of women and therefore reduces poverty (Tripp & and Viner, 2005)

According to DESA (2013) report, the world was estimated to have 1.6 billion persons aged between 12-24 years of which 721 million were adolescents and 142 million were in Africa. Adolescent women account for one fifth of the population of all women of reproductive age group (15-49). Most of the adolescents especially in Sub Saharan Africa live in low income countries. These Sub Saharan countries are also associated with early marriages and early child bearing. It is estimated that 29% of female adolescents are married and 30% have ever had(Sigh *et al* 2009) Globally female

adolescents' birth accounts for 14 million births annually and 6 million of these are unintended. Only a third of adolescents use contraceptives and there is an unmet need for contraceptives of 60% among adolescents. The consequences of these unintended pregnancies are unsafe abortions. Adolescent females tend to go for unsafe abortion because they would not want to be dropped from school, the partner does not have recourses to support the pregnancy and at times the responsible partner refuses to accept responsibility (Dela A, 2003). Ghana is one of the countries in Sub Saharan Africa that is also facing challenges with adolescent health despite efforts the country has made to promote adolescent health.

According to the Ghana report of 2006, 30% of adolescents had ever had sex. The majority of these sexual encounters occurred outside marriage. Most of the adolescents were indulged in unsafe sexual behaviors.(Kofi A, 2006). Unsafe sexual behaviors include: premarital sex, sex for money sex for academic reasons, sex for pleasure, sex with strangers, multiple sexual partners, forced sex and unprotected sex(Dela A, 2003)

According to (GDHS, 2015), 27% of women of child bearing age use contraceptives, 14% of adolescents in Ghana begin child bearing of which only 19% use contraceptives. There are variations in data pertaining to adolescent sexual health in various regions of the country according to the GDHS. Ashanti region where Manhyia District is found has 11.9% of the adolescents who have started child bearing in the region and a contraceptive prevalence rate of 26.4% which both indicators are lower than the national average of 14% and 27% respectively (GDHS 2015). There is therefore the need to have an insight of the prevailing sexual behaviors, knowledge and use of contraceptives among female adolescents in the district in order to provide comprehensive services. The assumption which is being made in this study is that since

Senior High Schools consist of girls that are in their adolescent age they will provide a better representation of the female adolescents in the district.

1.2 PROBLEM STATEMENT

Family planning is one of the strategies that is working in reducing maternal deaths, thus achieving MDG 5.It is globally estimated that one in three maternal deaths could be avoided if women who wanted effective contraception had access to it. There has been a significant difference in maternal mortality ratio in countries with higher contraceptive prevalence rate (CPR) and those with lower CPR globally (Saifuddin Ahmed et al., 2012). The current global focus is to provide modern family planning methods to more than 120 million women in their reproductive age group who have unmet need for family planning in developing countries by the year 2020 named FP 2020.

Ghana is one of the developing countries in Africa whose CPR is currently very low at 34.3% and an unmet need of family planning of 26.4 % (Ghana Statistical Service, 2012). Family Planning 2020 (FP2020) suggests that, all women in the reproductive age group of 15-49, no matter where they leave should have access to life serving contraceptives. (LSFP, 2012)

Knowledge and awareness about family planning in Ghana are almost universal, but utilization has been less than desired (Stephen *et al*, 2011). It has been observed that often married women in the reproductive age group who make use of family planning services. Adolescents are almost all in the reproductive age group have little access to family planning services. Adolescents are subjected to unsafe sexual behaviors that usually result in complications and unsafe abortions. As one of the goals of FP2020 states that, all women, no matter where they are should have access to life saving

contraceptives, this act as a barrier. If a group in the reproductive age is not included in the access to family planning services program, the contraceptive utilization will not reach the desired target. It is against this background that, I conducted conduct a research to determine the sexual behavior knowledge and utilization of contraceptive services by female adolescents in Senior High Schools in Manhyia Sub Metro of Kumasi, Ghana

1.3 RATIONAL OF THE STUDY

Adolescents accounts for one third of the population in the Sub Saharan region. There have been a lot of programs that the government has been running to promote the health of the adolescents however there is little progress. This study will assist the authorities in Manhyia Sub Metro to come up with interventions that will be specific for the district.

1.4 CONCEPTUAL FRAMEWORK

The *Health Belief Model* has been adapted to explain the sexual behavior and contraceptive use among female descents. The *Health Belief Model* is a psychological model that attempts to explain and predict human behavior in relation to health. The key concepts in the model include perceived threat, perceived barriers perceived benefits cues to action and modifying and enabling factors. (Hall, 2012)

A senior high school girl may have a perceived threat of getting pregnant that will consequently lead her to drop out of school. This will reduce her chances of achieving her life time goals. Pregnancy may also make her feel socially embarrassed as it may be perceived as a sign of promiscuity. The responsibility of being a parent as well may also be a threat to the girl. The idea of abortion and its potential for loss of life will also make a girl fear pregnancy. All these may lead to a motivation to use contraceptives.

The school girl will also see that the utilization of contraception is effective in prevention of pregnancy and this will be a perceived benefit for her to be motivated for its usage. There will be perceived barriers like lack of knowledge on the use, inconvenience to go and get the method for her school time, religion, and partner demand for no use and even lack of access to contraceptive services due to costs that she may have to incur in the process and unfriendly provision of the service as well. Cues to action may be internal and external. Internally, the physiological perception of missing a period after sex will trigger a need for contraception and externally acquisition of information from the media, health authorities and parents on contraceptive use will also motivate the girl to use contraceptives.

Modifying and enabling factors interact with an individual's perception of pregnancy and decision making to influence contraceptive use. A lot of studies have been to establish the relation between contraceptive use and age, ethnicity, education background and income. In early adolescence the decision to use contraceptives may not be there as one may not yet have started indulging in sexual intercourse as the age increases the motivation will or increases due to exposure to sexual activities. Minority ethnic groups have little access to public services and this may not give them access to contraceptive services. Social factors like religion may also influence ones decision to use contraceptives due to the fact that some groups do not allow the use of contraceptives. Girls may also be involved in sexual activities under the influence of alcohol or illicit drugs and their ability to decide on contraceptive use may be affected. Girls who psychologically have self-esteem and self-control will have the determination of achieving the highest possible level in their set goals and would not let pregnancy to be a hindrance. Reproductive or sexual behavior also determines the decision to use contraceptives. Some girls have an early sexual debut which is usually

unplanned and contraceptive use may not be used. Others have multiple sexual partners whose sexual demands may be different. Having sex for money where the man with money may not be comfortable with contraceptive use.

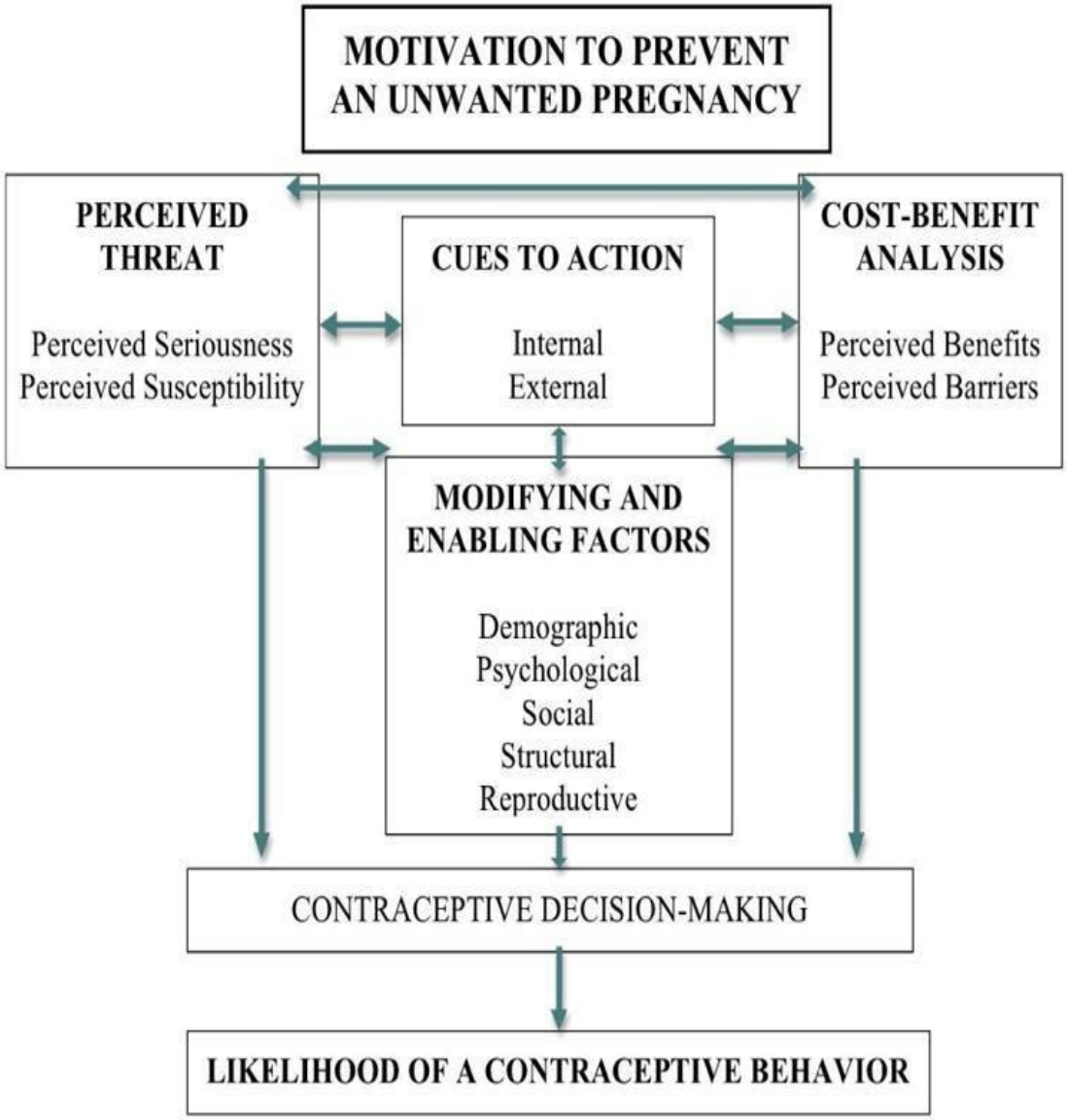


Figure 1.1: Conceptual Framework

Source: Hall, 2012

1.5 RESEARCH QUESTIONS

1. What types of contraceptive services are available for Senior High School girls in Manhyia Sub metro?
2. What kind of Sexual behaviors are the girls involved in?
3. How much knowledge do these girls have on Contraceptives
4. What proportion of the girls uses contraceptives in the Sub Metro?
5. What factors are associated with contraceptive use among the girls in Senior High Schools?

1.6 OBJECTIVES

1.6.1 General objective

To describe the sexual behavior and determine contraceptive knowledge and usage among Senior High School girls in Manhyia Sub Metro...

1.6.2 Specific Objectives

1. To assess knowledge of Senior High School girls on contraceptive use.
2. To describe the sexual behaviors of girls in Senior high Schools in Manhyia Sub Metro
3. To determine the proportion of sexually active girls that use contraceptives
4. To determine factors associated with contraceptive use among Senior High School Students.

1.7 Organisation of Report

This report is arranged into six chapters. Chapter one gives the background of the study, problem statement and its objectives among others whereas chapter two reviews related literature according to the study variables. The methodology, results and discussion of

the findings are entailed in chapters three, four and five respectively and the last chapter, chapter six, provides the conclusions and recommendations of the study.

CHAPTER 2

LITERATURE REVIEW

2.1 Introduction

The aim of this study was to assess the sexual behavior and contraceptive knowledge and use among SHS girls. This chapter seeks to have an overview of studies that have been done globally and some specific places in Ghana in relation to the topic. The chapter has been subdivided according to the dependent variables identified in the study which are sexual behavior, knowledge of contraceptives and contraceptive usage.

This chapter attempts to look at some of the studies that have been done in relation to the topic.

2.2 Sexual Behaviours Among Adolescents

As part of the transition from childhood to adulthood, all adolescents experience sexual feelings. Some act upon these feelings by having sexual intercourse; others don't have intercourse but engage in behaviors stopping short of penile/vaginal intercourse; some engage in anal intercourse or oral sex and others deny their sexual feelings by focusing intensely on non-sexual pursuits.(WHO, 2004). Adolescents engage in a number of sexual behaviors. These behaviors include premarital sex, sex for money, sex for pleasure etc. It is reported that 30% of adolescents in Ghana indulge in premarital sex according to Ghana 2006 report. (Dela Afenyadu, 2003) did a study in Dodoma district in Ghana on adolescent sexual and reproductive health in which he found out that 44% of in school girls had ever had sex. The reasons mentioned for sex were money, peer pressure and pleasure. They were having sex with sugar daddies to get monies to provide for their needs in school. Some were encouraged by their boy lovers to have

sex with rich people to have money to share in their affair. Other girls were also having sex with teachers for academic favors.

In a similar study in Nigeria on sexual activity and contraceptive knowledge and use among in school adolescents, 40% were sexually active and girls indicated that they were having intercourse with businessmen to get money to do their make-up and look according to prevailing fashions which their parents would not provide(Uche Amazigo, 1997).

Another element on sexual behavior among adolescents is early sexual debut which is the age at first intercourse. There has been a decrease in the age at which adolescents start having sexual intercourse. (Peltzer, 2010) did a study on early sexual debut and associated factors among in-school adolescents in eight African countries. These countries are in Sub-Saharan Africa and they included Botswana, Namibia Senegal Swaziland, Uganda Zambia and Zimbabwe. He noted that 27.3% of adolescents had sex before the age of 15 in these counties and among female adolescents it was 15. 8%. The early sexual debut was associated with use of alcohol, tobacco and illicit drugs. A study in Ethiopia on awareness, utilization and barriers to family planning services among female students at Asella Preparatory School, he lowest sexual debut among the students was found to be 15 years with 20 years as the maximum.(Tejineh S et al., 2015)

(Morhason-Bello IO et al., 2008) did a study in Nigeria on sexual behavior of inschool adolescents and they found out that 28.3% had sex before 15 years and among adolescent women it was 34.5% and 40% of these had sex with more than one partner. In (Adu-Mireku, 2003) study on family communication about HIV/AIDS and sexual behavior among senior secondary school students in Accra Ghana, it was found out

25% of the students were sexually active, 25.7% had their sexual debut before 11years and 64.7% had sex 16 years.

Sexual coercion is one of the problems experienced by female adolescents. (Ann M. Moore et al., 2007) did a study on coerced first sex among adolescent girls in SubSaharan Africa. Among the four countries where the study was conducted it was found that female adults had had their sexual debut through coercion. Sexual coercion was in different forms that included forced sex, pressure from money or gifts, males flattering pestering, boyfriends threatening to have sex with other girls and passive acceptance by from the girls. A study in Ghana by (Bingenheimer and Reed, 2014) on risk for coerced sex among female youth in Ghana, it was found that sexual coercion was associated with history of ever having a boyfriend by the youth. Related to sexual coercion is the involvement of adolescents in unprotected sex.

Coerced sex put the adolescent girl in a situation that she cannot negotiate for protected sex. Adolescent communication with parents on sexual behavior proved to efficient in a study that was conducted by (Potter *et al.,* 2014) that aimed at exploring sexual health communication quality between parents and their teen children . Teens who reported about sexual health communication with their parents were 5.2 times more likely to report protected sex in the past three months compared to those who did not communicate with their parents on sexual health.(Potter *et al.*, 2014)

Sex education is one of the factors associated with sexual behavior. According to a study by (Mueller *et al.*, 2008) on the association between sex education and youth's engagement in sexual intercourse, age at first intercourse, and birth control use at first sex it was found that sex education was associated with postponement of sexual intercourse up to the age of 15.

2.3 KNOWLEDGE ON CONTRACEPTIVE

The knowledge of contraceptives may have a bearing on usage by the adolescents. According to (WHO, 2004) generally, with the exception of male and female sterilization, all methods that are appropriate for healthy adults are also potentially appropriate for healthy, post-pubertal adolescents. Once puberty has been achieved, methods that are physiologically safe for adults are also physiologically safe for adolescents. However, as with adults, informed contraceptive decision-making entails consideration of more than just medical safety. Before discussing contraceptive options, adolescents must be given the opportunity to express their needs and to decide freely whether they want to protect against pregnancy or need to protect against STI/HIV. Once a decision is made for protection, sexually active adolescents should be presented with options that, if used consistently and correctly, will prevent pregnancy and, depending upon an individual's circumstances, prevent sexually transmissible diseases.

The WHO lists the following as the available methods for adolescents Contraceptive methods available for use by adolescents; dual protection and dual method use, barrier methods, emergency contraception, low-dose combined oral contraceptives (COCs), combined injectable contraceptives (CICs), new hormonal delivery systems, progestin-only pills (POPs), progestin-only injectable, progestin-only implants, intrauterine devices (IUDs), natural family planning/fertility awareness based methods, lactation amenorrhea method (LAM), withdrawal and male and female sterilization (although adolescents are medically eligible for this, these methods should only be rarely recommended). (Williamson *et al.,* 2009) conducted a systematic review of qualitative research to examine the limits to modern contraceptive use identified by young women

in developing countries. It involved review of seven studies of which six were from Sub Saharan Africa and one from South East Asia.

They identified lack of knowledge, obstacles to contraceptive access, fear of side effects and infertility as limits to use of modern contraceptives. In the same review they also found out that condoms though more easily accessible and attractive were also unpopular because they were of being associated with promiscuity and male control.

(Melaku *et al.*, 2014) in their study on sexual and reproductive health communication and awareness of contraceptive methods among secondary school female students in northern Ethiopia, they found that 15.8% of the students had ever had sex and 85% had ever used contraceptives. In the same sample 16% of the sexually active female students had ever had pregnancy of which 90% of them ended up terminating the pregnancy. In (Tejineh S et al., 2015) study in Ethiopia, 93.3% of the female students knowledge about contraceptives. The most common source of information among the students was mass media and the list was internet. The most commonly used was condom at 61%.

2.4 CONTRACEPTIVE USE

Adolescent pregnancy and child-bearing are associated with a range of adverse health outcomes, including elevated risks of pregnancy-related and unsafe abortion complications, and maternal death, as well as negative educational and economic consequences (Blanc and Way, 1998). Preventing teen pregnancy is generally considered a priority among policymakers and the public because of its high economic, social, and health costs for teen parents and their families. Teenage mothers and fathers tend to have less education and are more likely to live in poverty than their peers who are not teen parents.

Children of teenage mothers are more likely than children of older mothers to have chronic medical conditions, rely heavily on provided health care, do poorly in school, give birth during their teen years (continuing the cycle of teen pregnancy), spend some time in a juvenile detention facility or jail, and be unemployed or underemployed as a young adult (Solomon-Fears, 2015). A lot of studies have been done on contraceptive usage among female adolescents. (Mueller *et al.,* 2008) in the study on the association between sex education and youth's engagement in sexual intercourse, age at first intercourse, and birth control use at first sex they found that there was no association between sex education and contraceptive use among females however there was an association among males. To improve the reproductive health of adolescents there is need for provision of safe and effective methods of contraceptives however it has been observed that most of them rely on traditional methods promiscuity and male control. Contraceptive use among adolescents is associated with a number of factors (MacPhail *et al.,* 2007) did a cross sectional national study among young women aged 15-24years in South Africa. Fifty-two percent of those who are sexually active were using contraceptives.

The study showed that those who were in school were 1.6 (95% CI: 1.2-2.2) times more likely to use contraceptives than those note in school. Those who were governed by strict rules at home were 1.3 times more likely to use contraceptives. The females who were having sex with a main partner were also like to use contraceptives than those with casual partners. The study also found an association between those who talked with their partners on contraceptive to be more likely to use them than those who did not discuss at all. Girls who were staying with a guardian/parent and were able to discuss with them on sexual health were also more likely to use contraceptives. An association was also there among those who had a history of ever been pregnant and

contraceptive use. (Tejineh S et al., 2015) study indicated that 94.3% of students who were not using contraceptives in Ethiopia did not have any chance of discussing contraceptive usage with their family members as it was associated with promiscuity.

In the same study religion was found to have a negative impact on contraceptive use. Forty three percent of those who were not using contraceptives reported that their religion was not permissive on contraceptive use, buying contraceptives or been seen with them constituted promiscuity and were to be punished. (Nyarko, 2015) did a study on prevalence and correlates of contraceptive use among female adolescents in Ghana, the study founded that female adolescent contraceptive use was significantly determined by age of adolescent, education, work status, knowledge of ovulatory cycle, visit of health facility and marital status.

CHAPTER 3

METHODOLOGY

3.1 INTRODUCTION

The study was conducted in Manhyia Sub Metro of Kumasi. This chapter gives the details on the methodology that was used to complete it. It includes the study design, study area, study population, study variables, sampling method, pretesting, data collection ethical issues, data analysis limitations and assumptions.

3.2 STUDY DESIGN

This study was a descriptive cross-sectional study that assessed the sexual behavior and knowledge and use of contraceptives among girls in Senior High Schools in Manhyia sub metro. The study was conducted between July and September 2015 among girls that were admitted within the selected schools in the sub metro.

3.3 STUDY AREA

Manhyia Sub-metro is the third largest of the five (5) sub-metros in the Kumasi Metropolis in the Ashanti region. The Sub-Metro is located in the north-eastern part of Kumasi Metropolis and bounded on the north by Manhyia North, south by Subin, east by Asokwa and west by Asokore Mampong. It forms 18.6% of the Metro population.

3.3.1 POPULATION

The sub-metro had a projected population of **367,710** at the beginning of the year, 2015. The WIFA population of (26.7%) is **98,179** and expected pregnancy population of **14,708** that is (4%). Table 3.1 shows the population age groups for 2013, 2014 and 2015 (source, Kumasi Metro HMIS office)

Table 3.1: Population Age Groups for 2013, 2014 and 2015

	2013	2014	2015
Total Population	**357,806**	**367,467**	**367,710**
WIFA (26.2%)	**95,534**	**98,114**	**98,179**
Expected Pregnancies (4%)	**14,312**	**14,699**	**14,708**
Expected Births (4%)	**14,312**	**14,699**	**14,708**
Children 0 - 11 mths (4%)	**10,734**	**14,699**	**14,708**
Children 12 - 23 mths (3.9%)	**10,376**	**10,657**	**10,664**
Children 24 - 59 mths (8.6%)	**27,551**	**28,295**	**28,314**
Children 0 - 59 mths (16.5%)	**48,662**	**53,650**	**53,686**
Children 6 - 59 mths (14.5%)	**43,295**	**44,463**	**44,493**
Adolescents (22.9%)	**81,938**	**84,150**	**84,206**

School Age (36.4%)*	**130,241**	**133,758**	**133,846**
Adults 64+ (6.1%)*	**21,826**	**22,415**	**22,430**
Growth Rate	Growth Rate (2.7%)	Growth Rate (2.7%)	Growth Rate (2.7%)

3.3.2 HEALTH FACILITIES

There are twenty-one (Health Facilities) within the Sub-Metro. Table 3.2 below shows the breakdown. There are also three private laboratories, twenty eight (28) pharmacy shops and seventeen (17) chemical shops located within the Sub-metro. A total of fifteen facilities provides reproductive and child health services within the Sub-Metro.

Table 3.2: Health Facilities

Gov't Hospitals	**1**
Gov't Clinic	**2**
Private Hospitals	**5**
Private Clinics	**8**
Maternity Homes	**5**

3.3.3 EDUCATION

There are eighteen (18) public schools and ninety four (94) private schools.

3.3.4 CLIMATE

The climate is typically wet equatorial with the major rainy season running from late February to early July and the minor from mid-September to early November. The dry season is at its peak in the months of December and January to 30°C in March. The vegetation can be described as mostly semi-deciduous forest with several valuable trees.

3.3.5 ECONOMIC ACTIVITY

The main occupations of the citizens are trading. Commercial activity is centered on wholesaling and retailing. Manhyia South is closer to the single largest traditional market in West Africa called the Kumasi Central Market which is located in the Subin Sub-Metro but stretches to the Manhyia Sub-Metro. It has over 10,000 stores and stalls. There are many other smaller market centers within the Sub-Metro

3.3. 6 Transportation

The main form of movement is by public transport system, the Sub-metro has the Dr Mensah station, and it is also closer to the Kejetia lorry station where vehicles transport people to other Districts, Regions and within the Sub Metro.

3.3.6 ELECTRICITY AND WATER SUPPLY

Kumasi has 5 bulk supply points with 231km of overhead lines and 140.6km underground cables which the Manhyia Sub-metro forms part. The supply of water to the Kumasi Metropolis is from two surface water treatment plants;

- Owabi10km away from the City
- Barekese16km

Apart from these two major water supplies, there are a lot of deep and shallow wells used in some homes as well as mechanized and non-mechanized bore holes.

3.3.7 Telecommunication

The city has wider network coverage. It is linked to six (6) mobile networks and a fixed line system. MTN, GLO, Tigo, Vodafone, Airtel and Expresso. It also has about four FM Stations which serves as communication channels. There are also a number of internet cafes spread around the Sub Metro.

3.3.8 Culture/Festivals

The Manhyia Palace which is the Palace of one of the biggest kingdom in Africa is located within the Manhyia South Sub-Metro. Two festivals Odwira and Akwasidae are celebrated every forty days and once in a year (December) respectively.

3.3.9 Religious Groups

The major religious groups known in the metropolis are Christians, Moslems and Traditionalist.

3.4 SAMPLING

The target population in the study was all females in Senior High Schools in Manhyia Sub Metro. The sample size was calculated using Epi Info version 7, using a confidence level of 95%, expected frequency which was based on adolescent contraceptive prevalence rate of 19% and a confidence limit of 5%. A non-response rate of 10% was also added that made the total sample required to be 272.At the end of the study 240 questionnaires were administered representing 88% response rate. The district has 4 Senior high Schools. The number of participants were proportioned to each school basing on total number of girls in the school. A random selection of girls was done in each class.

3.5 STUDY VARIABLES

Dependent Variables

- Sexual behavior
- Knowledge of Contraceptives
- Contraceptive utilization

Independent Variables

- Age
- Religion
- Grade
- Ethnicity
- Residence
- Parenthood (single parent, both parents available, orphaned)
- Social behavior (alcoholism, smoking, clubbing)
- Marital status
- Number of children

3.6 DATA COLLECTION

A self-administered structured questionnaire was prepared and pretested among female students in the Kwame Nkrumah University of Science and Technology. Eight research assistants were trained and they administered the questionnaire to the girls in the selected schools.

3.7 ETHICAL CONSIDERATION

The study was approved by the Committee on Human Research, Publication and Ethics (CHRPE) of KNUST and the Director of Health from Kumasi Metro upon a written request. Requests were made from Heads of the respective Senior High schools where the data was collected. For the selected students, their consent was sought before

interviewed. The consent addressed issues relating to confidentiality of their responses. The students were assured that their names were not required in order to participate in the study and that they were at will to complete or discontinue the interview at any time without a penalty. They were also assured that the responses provided would not be associated with them now or in the future.

3.8 DATA ANALYSIS

The data was checked manually for accuracy and completeness. Double entry of the data was done using Microsoft excel 2013 and exported to STATA version 12.0 statistical software package for statistical analysis of the data.

3.9 STUDY LIMITATION

The data was collected among SHS girls in forms 1 and 2 only, this was because during the period, form 3 girls had written their examinations and gone home for holidays. Some girls had low understanding of the English language that they could follow what the question was asking for.

3.10 ASSUMPTIONS

The following assumptions were made:

1. All respondents provided exact and accurate account on the subject matter.
2. All respondents were able to recollect vividly their experience and provide them accurately.
3. The instruments used were accurate and reliable in capturing the required data.

CHAPTER FOUR

RESULTS

This chapter presents the findings of the study. All 240 questionnaires given out merited inclusion into the analysis. Results are presented in tables and graphs and arranged based on the objectives of the study.

4.1 Background characteristics of Respondents

Table 4.1 presents the socio-demographic/economic and family characteristics of the respondents involved in this study. Almost 75% of the respondents were between the ages 15 – 19 years whereas only 9 respondents (3.5%) were below 15 years of age. Two hundred and thirty-five respondents (97.9%) were single whereas 1.3% were cohabiting and 0.8% were single. Respondents in this study were mostly Akans (42.5%) and Christians (71.3%). About 51.7% of the respondents were staying with their partners as at the time of the study. Majority of the respondents (24.2%) found it very easy to talk to the people they are staying with but only few of them (20.4%) were able to confidently discuss sex-related matters with them and only 14.2% are able to do this very often or regularly. It is obvious per the study that mothers are the ones the girls usually find very lenient and comfortable in discussing their sex-related issues with, since they are of the same gender and will enable them to understand their problems with ease. Majority of the students (51.7%) live with both parents since greater percentages of the students (72.5%) have both parents alive at the time of the study. The kind of activities few of the respondents were engaged in included attending cinema halls to watch movies (19.6%), drinking alcohol (10.8%) and smoking of cigarettes (2.1%). More than 70% of the respondents involved in the study did not take part in the above mentioned acts.

Table 4.1 Socio-economic and family characteristics of respondents

	Frequency	Percentage
Age in years (n=240)		

<15	9	3.75
15 – 19	182	75.83
20 – 24	49	20.42
Marital status (n=240)		
Married	2	0.8
Single	235	97.9
Co-habitation	3	1.3
Ethnicity (n=240)		
Akan	102	42.5
Dargaaba	12	5.0 8.3
Frafra	20	4.2 6.7
Kusasi	10	8.8
Ga	16	24.6
Ewe	21	
Others	59	
Religion		
Christian	171	71.2
Moslem	54	22.5
Traditional	15	6.3
Who they stay with?		
Both parents	124	51.7
One parent	38	15.8
Relatives	31	12.9
Guardian	28	11.7
Friend	12	5.0
Alone	7	2.9
Who they Discuss important matters with		
Very difficult	50	20.8
Difficult	41	17.1
Average	52	21.7
Easy	21	8.8
Very easy	58	24.2
Don't discuss important things	18	7.5
Discuss sex matters		
Yes	49	20.4
No	150	62.5
Occasional	41	17.1
Both parents alive		
Both alive	174	72.5
Mother alive	23	9.6
Father alive	10	4.2
None alive	33	13.8
Go to clubs		
Yes	62	25.8
No	178	74.2
Go to cinema halls		
Yes	47	19.6
No	193	80.4
Drink alcohol		
Yes	26	10.8
No	214	214
Smoke cigarettes		

Yes	5	2.1
No	235	97.9

Source: Field data, 2015

4.2 knowledge on Contraception

Table 4.2 present results of respondents' knowledge on contraceptives. This was assessed by the respondent's ability to recognize a number of contraceptives that were listed. Those who were knowledgeable were those who were able to recognize more than three methods were said to be knowledgeable on contraceptives. It was noted that 62.1 % of the respondents knew more than two methods of contraception. Knowledge was also assessed through the ability of the respondent to mention the contraceptive methods that are suitable for students. It showed that 65.5% of the students indicted that there is only one method that is suitable for students and this was the condom.

Only 14.2% indicted more than one method being suitable for students.

Table 4.2 knowledge on Contaceptives

Variables	**Frequency**	**Percentage**
Methods they have you heard of		
One method known	55	22.9
Two methods	16	6.7
More than two	149	62.1
None	20	8.3
methods they think are suitable for young people		
One method known	157	65.5
Two methods	24	10
More than two	34	14.2
None	25	10.4

Source: Field data, 2015

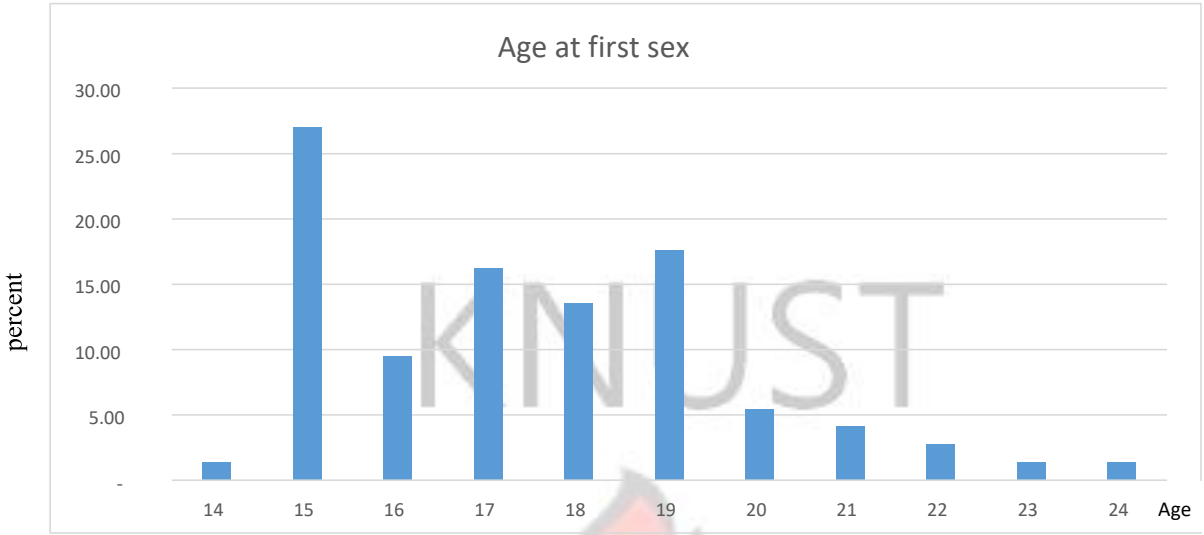
4.2.1 Sexual Behavior

Sexual behavior was determined on whether the girl has a boyfriend or not, how many does she have, has she ever had sex, at what age did she had her first sexual intercourse and if she has ever had sex with a stranger. Out of all the respondents (n=240), 48.7% of had boyfriends. A larger proportion (78.8%) of these had one partner however 14.41 respondents had two partners. On having sexual intercourse, 30.8% of the respondents had ever had sex and out of these 10% had ever had sex with a stranger. Figure 4.1 shows the age at first intercourse, a larger proportion of those who have ever had sex (27%) had their sexual debut at the age of 15.

Table 4.3 Sexual Behaviour

Variables	Frequency	Percentage
Do you have a boyfriend		
Yes	117	48,7
No	123	51.2
Have you ever been in a relationship with two or more people at the same time?		
One boyfriend	93	78,8
Two boyfriends	17	14.4
More than two	7	7.6
Total	117	
Have you ever had sex?		
Yes	74	30.8
No	166	69.2
Have you ever had sex with a stranger?		
Yes	10	13.5
no	64	86.5

Figure 4.1 Age at first sexual intercourse

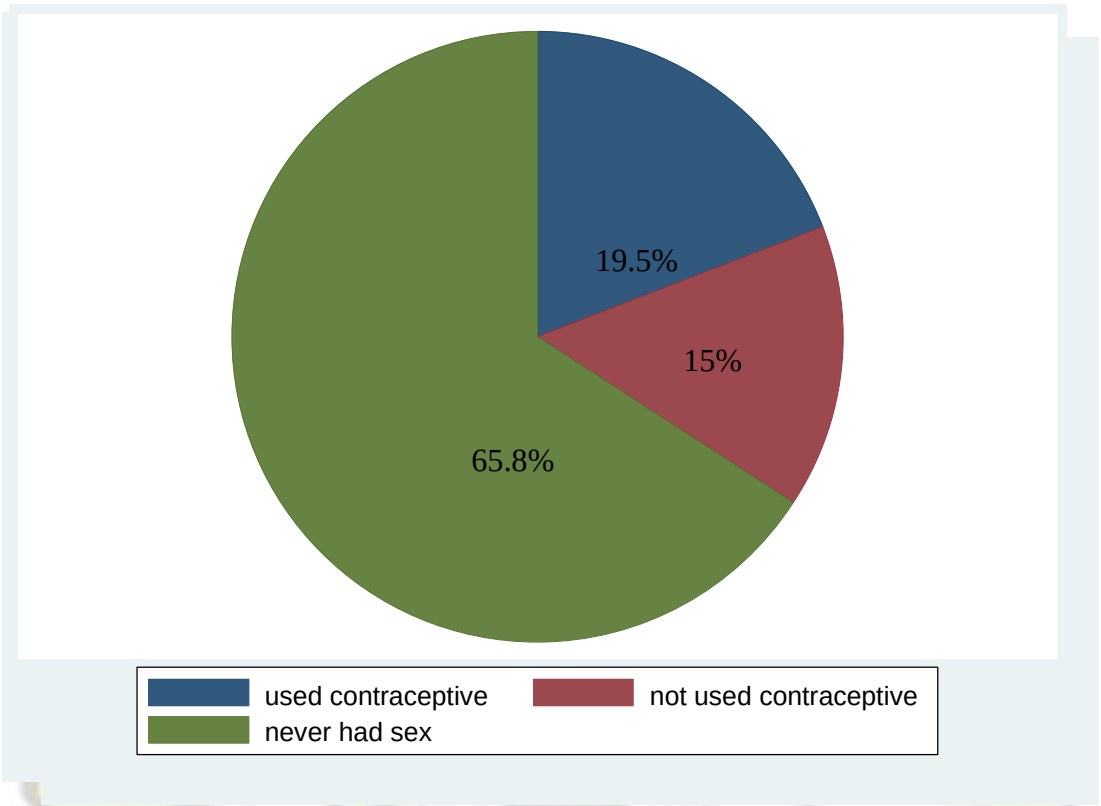


4.3 Contraceptive Use and Factors Associated with the Contraceptive Use among the Students

4.3.1 Contraceptive Use

Figure 4.2 below shows pie chart on contraceptive use. It was found that 19. 1% of the girls who had sex used contraceptives, 15.0% did not use and 65.8% never had sex.

Figure 4.2 Contraceptive Use



Source: field data 2015

4.4 Differences in Socio-economic characteristics

Majority of the respondents (65.0%) who have ever used a contraceptive method were less than 20 years compared with about 83.0% of the non-users within the same age category. Approximately, equal proportion of the users (96%) and non-users (98.0%) were single. About one-fifth of the users were Akans compared with 46% of the nonusers. Almost an equal proportion of the users and non-users were Christians.

The difference between the users and non-users was statistically significant with respect to age ($p = 0.013$) and ethnicity ($p = 0.002$). On the other hand, marital status ($p = 0.245$) and religion ($p = 0.511$) did not show any statistical significance as shown in table 4.4 below.

Table 4.4 Percentage distribution of Socio-economic characteristics of respondents by their contraceptive uptake

Variable	Contraceptive Use		
	Use **n (%)**	**Non-use** **n (%)**	Fisher's test
Age			
<15 – 19	30 (65.2)	161 (83.0)	
20 – 24	16 (34.8)	33 (17.0)	
Total	46	194	0.013
Marital status			
Married	1 (2.2)	1 (0.5)	
Single	44 (95.6)	191 (98.5)	
Co-	1 (2.2)	2 (1.0)	
habitation			
Total	46	240	0.245
Ethnicity Akan			
	12 (26.1)	90 (46.4)	
Dargati	1 (2.2)	11 (5.7)	
Frafra	8 (17.4)	12 (6.2)	
Kusasi	6 (13.0)	4 (2.1)	
Ga	3 (6.5)	13 (6.7)	
Ewe	6 (13.0)	15 (7.7)	
Others	10 (21.7)	49 (25.3)	
Total	46	194	0.002
Religion Christian			
	34 (73.9)	137 (70.6)	
Moslem	8 (17.4)	46 (23.7)	
Traditional	4 (8.7)	11 (5.7)	
Total	46	194	0.511

Significant at $p < 0.05$; $p < 0.01$

Source: Field data, 2015

4.5 Difference in Family characteristics

Approximately, half of the users and non-users were staying with both parents. More than one-fourth of the users indicated that it was very difficult to discuss important matters with their parents compared with less than one-fifth of the non-users. Approximately, an equal proportion of the users (61.0%) and non-users (63.0%) indicated they do not discuss sex matters with their parents. Less than three-quarters of

the users indicated both parents to be alive compared with three-quarters of the non-users.

The observed difference among the users and non-users with respect to the family characteristics considered in the study were found to be statistically insignificant (p>0.05).

Table 4.5 Percentage distribution of Family characteristics of respondents by their contraceptive uptake

Variable	Contraceptive Use		Fisher's test
	Use n (%)	**Non-use n (%)**	
Who they stay with			
Both parents	23 (50.0)	101 (52.1)	
One parent	4 (8.7)	34 (17.5)	
Relatives	6 (13.0)	25 (12.9)	
Guardian	8 (17.4)	20 (10.3)	
Friend	3 (6.5)	9 (4.6)	
Alone	2 (4.4)	5 (2.6)	
Total	46	194	0.442
Discuss important matters with parents			
Very difficult	14 (30.4)	36 (18.6)	
Difficult	7 (15.2)	34 (17.5)	
Average	8 (17.4)	44 (22.7)	
Easy	7 (15.2)	14 (7.2)	
Very easy	9 (19.6)	49 (25.3)	
Don't discuss	1 (2.2)	17 (8.8)	
Total	46	194	0.150
Discuss sex matters with parents			
Yes	14 (30.4)	35 (18.0)	
No	28 (60.9)	122 (62.9)	
Occasional	4 (8.7)	37 (19.1)	
Total	46	194	0.082
Whether parents are alive?			
Both alive	29 (63.0)	145 (74.7)	
Mother alive	8 (17.4)	25 (12.9)	
Father alive	8 (17.4)	15 (7.7)	
None alive	1 (2.2)	9 (4.6)	
Total	46	194	0.146

Significant at $p < 0.05$; $p < 0.01$

Source: Field data, 2015

4.6 Difference in risky behaviors

One-half of the users indicated they go to clubs for enjoyment compared with onefifth of the non-users. About 61% of the users indicated they do not go to cinema hall compared with 85% of the non-users. In the same vein, almost three-quarters of the non-users indicated they do not drink alcohol compared with more than ninety percent of the non-users. More than ninety percent of both users and non-users indicated that they do not smoke cigarettes.

A statistically significant difference was observed among the users and non-users with respect to going to clubs ($p = 0.001$) and cinema halls ($p = 0.001$) as well as drinking alcohol ($p = 0.001$). On the other hand, smoking cigarettes was not found to have a statistically significant difference on contraceptive uptake among the adolescents.

Table 4.6 Percentage distribution of risky behaviors of respondents by their contraceptive uptake

Variable	Contraceptive Use		Fisher's test
	Use n (%)	**Non-use n (%)**	
Go to clubs			
Yes	23 (50.0)	39 (20.1)	
No	23 (50.0)	155 (79.9)	0.001
Total	46	194	
Go to cinema halls			
Yes	18 (39.1)	29 (15.0)	
No	28 (60.9)	165 (85.0)	0.001
Total	46	194	
Drink alcohol			
Yes	12 (26.1)	14 (7.2)	
No	34 (73.9)	180 (92.8)	0.001
Total	46	194	
Smoke cigarettes			
Yes	3 (6.52)	2 (1.0)	
No	43 (93.48)	192 (99.0)	0.050
Total	46	194	

Significant at $p < 0.05$; $p < 0.01$

Source: Field data, 2015

4.7 Effects of socio-economic characteristics and risky behaviors on contraceptive uptake

4.7.1 Logistic regression analysis

The result of the logistic regression analysis shows the effect of socio-economic characteristics and risky behaviors on contraceptive uptake. Logistic regression was used for variables which showed some level of association with contraceptive uptake after the Fisher's test.

The unadjusted effect of age on contraceptive uptake showed that adolescents within the age group of 20 – 24 years were more than twice likely (OR=2.6; 95% CI=1.27 – 5.31) to use a contraceptive methods compared with adolescents within the age group

of <15 – 19 years. Similarly, the adolescents who belong to the Frafra (OR=4.27; 95% CI=1.13 – 13.83) and Kusasi (OR=13.12; 95% CI=3.00 – 57.33) ethnic group were significantly more likely to use a contraceptive method compared with the Akans. The unadjusted effect showed that adolescents who do not go to clubs (OR=0.25; 95% CI=0.13 – 0.49), cinema halls (OR=0.27; 95% CI=0.13 – 0.56), and do not drink alcohol (OR=0.22; 95% CI=0.09 – 0.52) had a lower odds of using a contraceptive method compared with those who do otherwise.

Table 4.7 Unadjusted and adjusted effects of socio-economic characteristics and risky behaviors of adolescents on contraceptive uptake

Variable	Unadjusted		Adjusted	
	OR	**95% CI**	**OR**	**95% CI**
Age				
<15 – 19	1.0		1.0	
20 – 24	2.60**	1.27 – 5.31	2.03	0.90 – 4.60
Ethnicity				
Akan	1.0		1.0	
Dargaati	0.68	0.08 – 5.76	0.97	0.11 – 8.50
Frafra	5.00**	1.70 – 14.70	4.27*	1.31 – 13.83
Kusasi	11.25**	2.77 – 45.70	13.12**	3.00 – 57.33
Ga	1.73	0.43 – 6.97	1.07	0.23 – 5.03
Ewe	3	0.98 – 9.21	2.29	0.66 – 7.91
Others	1.53	0.62 - 3.80	1.24	0.47 – 3.27
Go to clubs				
Yes	1.0		1.0	
No	0.25**	0.13 – 0.49	0.34*	0.13 – 0.92
Go to cinema halls Yes				
	1.0		1.0	
No	0.27**	0.13 – 0.56	0.71	0.24 – 2.09
Drink alcohol Yes				
	1.0		1.0	
No	0.22**	0.09 – 0.52	0.52	0.18 – 1.50

**indicates significant at p < 0.05 ***indicates significant at *p*<0.01

Source: Field data, 2015

CHAPTER FIVE

DISCUSSION

5.0 Introduction

This chapter presents the discussions of the study. It involves the discussion of the findings of the study in relation to other published literature based on the objectives of the study.

Despite great progress in family planning uptake over the last several decades, more than 120 million women worldwide want to prevent pregnancy, but they and their partners are not using contraception (WHO, 2007). Enhanced access to family planning services in sub-Saharan Africa would result in marked reductions in unintended pregnancies and unsafe abortions and a projected 69% decrease in maternal deaths and a 57% decrease in newborn deaths (Guttmacher Institute, 2010). This makes the scaling up of family planning interventions important in the socioeconomic development of many nations. This study involved the study of SHS girls which represent an important group in Ghana.

5.1 Knowledge on Contraceptives

Although there are choices of effective methods of contraception available on the market today for family planning, not all people have the same level of familiarity with or access to the various methods. Acquiring knowledge of contraceptive methods and understanding the usefulness of family planning is an important precondition towards gaining access to and use of a suitable family planning method(N Saluja et al., 2009)

Contraceptive usage depends on knowledge of the contraceptives. With no knowledge on contraceptives one may not decide to use them and this may lead to unintended pregnancies and consequently unsafe abortions especially in female students. A study done by (Biney, 2011) concluded that lack of knowledge among Ghanaian women led to failure of contraceptives which led to unintended pregnancy and unsafe abortions.

Also, (Lindstrom and Hernandez, 2006)in their study in Guatemala among recent rural-urban migrants associated limited knowledge of contraceptive methods with unmet need and limited choice of contraceptives.

Results. From this study indicate that, majority of the respondents (62.1%) are knowledgeable about contraceptives. This agreees with the study by (Stephen et al 2011) which indicate that knowledge of contraceptives in Ghana is universal but it is the use that is low. This also enatails why in Ghana, according to(GDHS, 2015) there is a difference in contraceptive use among those with education(34.0%) and the uneducated (19.0%) and in the same it is indicated that 23.0% of non educated girls get pregnant.

The results also indicate that most of the respondents(65.8%) mentioned only one contraceptive method as suitable for young girls. According to (WHO, 2004) there are a number of conraceptive methods that young girls may use upon being counselled and these includedual protection and dual method use, barrier methods, emergency contraception, low-dose combined oral contraceptives (COCs), combined injectable contraceptives (CICs), new hormonal delivery systems, progestin-only pills (POPs), progestin-only injectable, progestin-only implants, intrauterine devices (IUDs), natural family planning/fertility awareness based methods, lactation amenorrhea method (LAM) and withdrawal method and although they are medically eligible for female sterilization health workers do rare recommend. However there is emphasis on the use of dual protection whereby the girl has to be protected from both pregnancy and HIV and this can be achieved through the use of condoms. The results in this study indicate that the method of contraceptive that the students recommend to themselves is the condom method which is also in line with WHO recommendation. These results are similar to (Hagan and Buxton, 2012)done amongst Ghana adolescents where the

condom (42.3%) was found to be the most known method and used amongst them. Whilst the condom is well known and a dual protection method as recommended at has been found out that consistence use among young people is a problem. A study done by(Bankole et al., 2007) on correct and consistent use of condoms among adolescents in Ghana, Burkina Faso, Malawi and Uganda found a variation in the countries on condom use and consistence and none of them reached a 100% level with Ghana having 47.0%. Therefore despite condoms being recommended for dual protection the girls should also be sensitized on the other methods that can be used together with the condom

5.1.1 Sexual Behaviour

Girls in Senior high Schools portray different types of sexual behavior of which some of them may be described as high risk sexual behaviors whereby they can lead to unwanted pregnancy and consequently unsafe abortion or contracting sexually transmitted infections. In this study it was found that 48.5% were in sexual relationships. While it may be possible to be in a sexual relationship without having sex it was discovered in this study that 30.8% of those in these relationships had ever had sex. These results are quiet similar to a study by (Abruquah, 2008) on knowledge, attitudes and practice of school adolescents in Kwaebibirem district of Ghana, 36.5% of the adolescents were found to be in relationships and 19% had ever had sex. The difference between the two studies is on number of sexual partners in which the current study shows that 78.8% had one partner and the rest had more than one partner, the latter showed that 10.4% had one partner and 26 % had multiple partners. This may be attributed to the fact that there is more awareness on sex education now than it was before and the youth are understanding the consequences of having a lot of sexual partners. This study also found that the sex debut among the girls was 15 years and in

(Abruquah, 2008) s study, it was found that the sexual debut was 11years, this might be due to the fact that the other study include Junior High School students.

The current study agrees with the study by (Peltzer, 2010) whose study involved adolescents in eight African countries and it was found that 23.3% of them had their sexual debut at age 15. Having a relationship is one of the associating factors to having ever had sex and this is shown in a study by (Bingenheimer and Reed, 2014), in Ghana where it showed that girls who had a boyfriend were 4.5 times more likely to have had sex than their counterparts without a boyfriend.

5.2.2 Contraceptive Use and Factors Associated with the Contraceptive Use among the Students

The (GDHS, 2015) reports that the current contraceptive prevalence rate among married women is at 27%, whereby 22% is on modern methods of contraception and 5% is on traditional methods of contraception. It also reports that 19% of women within the age of 15-19 years use contraception which agrees with the finding in this study whereby it was found that 19% of the girls in the study used contraceptives. A study by (Hagan and Buxton, 2012) in selected Senior High Schools in Ghana found that 21% of the students were using contraceptives which is similar to the current results.

Upon analysis of the results age and ethnicity were found to be associated with contraceptive use (p= 0.013 and 0.002 respectively).

Girls who were within the age of 20-24 were found to be close to three times more likely to use contraception than those within 15-19years. This also agrees with (Nyarko, 2015) where older students 18-19 years old were three times more likely to use contraception. This may be contributed by the fact that the older ones are more mature

and might have learnt more on contraceptives than the younger ones, and also they are more likely to be sexually active than their younger counterparts.

It was noted that among the ethnic groups of Akans, Frafra and Kusasi, the girls from Frara and Kusasi were more likely to use contraceptives than the Akans more than four times and thirteen times respectively. Again in the study by (Nyarko, 2015) there were four ethnic groups involved including the Akans, Ewe, Mole-Dagbani and GaDangme, the Akans came third in contraceptive use. This means there should be a certain aspect of the Akans tradition that has to be looked into thoroughly that has a bearing on contraceptive use amongst them.

Another significant factor I the study on contraceptive use was on social behavior whereby it was noted that students that did not go to clubs, drink alcohol and go to cinema were less likely to use contraceptives. This may be attributed to the fact that they are not sexually active than their friends who indulge in these behaviors. Alcohol drinking, clubbing and watching cinema are some of the risk factors that may to indulging in sex.

CHAPTER SIX

CONCLUSIONS AND RECOMMENDATIONS

This chapter presents the author's conclusions and recommendations based on the results and discussions made in the previous chapters**.**

6.1 Conclusion

The female students in the study have knowledge on contraceptives as the findings of the study showed that 62.1% of the students new at least three methods of contraception. The most commonly known method of contraceptive among them is the condom method and they recommend its use for themselves.

Almost half of the girls are in sexual relationships and a third of them are already indulged in sex. A large number (78.8%) of those in sexual relationships have only one partner. Nineteen percent of the girls use contraceptives. The contraceptive usage is associated with age, ethnicity, and social behavior which include clubbing, drinking alcohol and watching cinema. Girls who are more than twenty years are more likely to use contraceptives than those who are less. Most of Akans do not use contraceptives as compared to Fraras and Kusasi ethnic groups who were involved in the study. Girls who attend cinemas, drink alcohol and go clubs are more likely to use contraceptives that those who do not as they are more likely to be more sexually active.

6.2 Recommendations

6.2.1 Ministry of education

Following the results and discussions there is the need to improve on educating girls in schools on contraceptive methods because there is still a number of them that are not aware of contraceptives therefore teachers need to be equipped with knowledge on contraceptives. The girl's curriculum to have lessons that should cover all the contraceptive methods and they should be aware that there are a number of methods that they can use on top of using condoms.

6.2.2 Ministry of Health

The Ministry of health in collaboration with the Ministry of Education should intensify teaching the girls on behavioral change basing on the fact that almost half of them are sexually active. It should also include the social behavior. The Ministry should also do a thorough research on contraceptive use among the Akans as the results show that there is low usage amongst this ethnic group.

6.2.3 Non-Governmental Organizations working with the Youth

The NGOs has to work together with the Ministry of Education and that of health to assist them with resources to reach to all girls in the schools. Whilst the study only involved girls, it might be important that boys have to be involved. Girls in Junior High Schools may also require some interventions as it might be possible that some of the behaviors are learn at a very younger age.

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APPENDIX :QUESTIONNARE

SEXUAL BEHAVIOUR AND CONTRACEPTIVE USE AND KNOWLEDGE AMONG SENIOR HIGH SCHOOL GIRLS IN MANHYIA, KUMASI GHANA

INSTRUCTION: tick your answer in the box provided or fill in the gap providedRespondent ID ……

Name of School…

A.SOCIO-ECONOMIC AND FAMILY CHARACTERISTICS

AGE (years)……..**GRADE/CLASS**…….

1. **MARITAL STATUS**

1. Single☐ 3. Divorced☐ 2. Married☐
4. cohabiting☐

2. **ETHINIC GROUP**…….

1. Akan ☐ 4. Kusasi, ☐ 7. Others, ☐
2. Dargaati ☐ 5 Ga☐
3. Frafra, ☐ 6. Ewe☐ ,

3. RELIGION

1. Christian☐
2. Moslem☐
3. Tradition☐

4. Who do you live with?

1. Both parents☐ 4. Guardian☐ Specify
2. One 5. Friend☐ ……..
6. Alone☐
parent☐ 7. Others ☐
3. Relatives☐

5**. Do you find it difficult or easy to talk to him/her about things that are important to you?**

1 Very difficult☐ 5. Very easy☐
2. Difficult ☐ 6. Do not discuss important things with
3. Average☐ him/her☐
4. Easy ☐

6. Do you ever discuss sex-related matters with him/her?

1. Yes☐ 3.
2. No☐ Occasionally☐

7. How often do you discuss sex-related matters with him/her?

1. Often☐ 3.

2. Never☐ Occasionally☐

8. Who do you find easy to discuss sex-related matters with?

1. Mother☐ 4. Brother ☐ 7. Friend ☐
2. Father ☐ 5. Aunt ☐ 8. No one ☐
3. Sister ☐ 6. Cousin☐

9. Are your parents alive?

1. Yes, both alive☐ 3. Yes, Mother only alive ☐ 2. No, none alive☐ 4. Yes, Father only alive☐

10. Do you ever go to clubs or parties where young people dance?

1. Yes ☐ 2. No ☐

11. **How many times in the last month did you go to the club or parties where people dance?**

1. Once
2. Twice
3. More than twice
4. Not Applicable

12 Do you ever go to the cinema halls to watch movies?

1. Yes ☐ 2. No ☐

13 How many times in the last month did you go to watch movies?

1. Once
2. Twice
3. More than twice
4. Not Applicable

14. Do you drink alcohol?

1. Yes☐ 2. No☐

15. How many days in the last two weeks did you drink alcohol?

1. Once
2. Twice
3. More than twice
4. Not Applicable

16. Do you smoke cigarettes?

1. Yes ☐ 2. No☐

17 How many sticks of cigarette did you smoke in the last 7 days?

1. Once
2. Twice
3. More than twice
4. Not Applicable

B.KNOWLEDGE OF REPRODUCTIVE HEALTH AND SOURCES OF INFORMATION.

1 Have you ever learnt about sex education?

1. Yes☐ 2. No☐

2. **From whom or where did you learn about sex education**?

1. School teacher ☐ 5. Other relatives ☐ 9. TV/Video ☐
2. Mother ☐ 6. Friends ☐ 10. Other☐
3. Father ☐ 7. Radio ☐
4. Sister☐ 8. Books/magazines☐ 11. N/A☐

3. From whom or where would you prefer to receive more information on this topic?

1. School teacher☐ 6. Friends☐ Specify.....
2. Mother ☐ 7. Radio ☐ .....
3. Father ☐ 8. Books/magazines ☐ 11 N/A
4. Sister ☐ 9. TV/Video ☐
5. Other relatives☐ 10. Other

4 **Have you learnt about relationships?** ***Meaning boyfriend girlfriend, who share some form of intimacy***

1. Yes☐ 2. No☐

5. From whom or where did you learn about relationships? ***(Multiple answers apply)***

1. School teacher ☐ 6. Friends☐ 11. Other
2. Mother ☐ 7. Radio ☐ specify.....
3. Father ☐ 8. Books/magazines☐
4. Sister☐ 9TV/Videos ☐
5. Other relatives☐

12 N/A

6. **From whom or where would you preferred to learn more about relationships?**

1. School teacher ☐ 5. Other relative's☐ 9 TV/Videos ☐
2. Mother ☐ 6. Friends☐
3. Father ☐ 7. Radio ☐
4. Sister☐ 8. Books/magazines☐

7 what do you Know about the following statements.

a) A woman can get pregnant on the very first time that she has sexual intercourse

1. True ☐ 3. Don't Know/Not
2. False ☐ sure☐

b) A woman stops growing after she has had sexual intercourse for the first time

1. True ☐ 3. Don't Know/Not
2. False ☐ sure☐

c) A woman is most likely to get pregnant if she has sex while in her period.

1. True ☐ 3. Don't Know/Not
2. False ☐ sure☐

d) A woman cannot get pregnant when she has sex by standing.

1. True ☐ 3. Don't Know/Not
2. False ☐ sure☐

e) A woman cannot get pregnant when she thoroughly wash herself after sexual intercourse

1. True ☐ 3. Don't Know/Not
2. False ☐ sure☐

f. Masturbation can cause serious health problems

1. True ☐ 3. Don't Know/Not
2. False ☐ sure☐

C. CURRENT/ MOST RECENT HETEROSEXUAL RELATIONSHIP

1. **Have you ever had a boyfriend? Someone to whom you were emotionally and sexually attracted and whom you 'dated'**

1. Yes ☐ 2. No ☐

2. **How many boyfriends have you had for the past one year**?
    1. One B/F
    2. Two B/Friends
    3. More than two
    4. N/A

3 How old is/was him when you started the relationship?

1. 15-19yrs
2. 20-24
3. 25 and above
4. N/A

4 What was his marital status when you started your relationship?

1. Married☐ 3. Divorced ☐ 5. Don't Know☐
2. Widowed ☐ 4. Single, unmarried ☐ 6. Not Applicable☐

5. What was the occupation of your partner when you started your relationship?

1. **Student**
2. **Employed**
3. **Not employed**
4. **N/A**

6. Has the relationship ended?

1. Yes☐ 2. No☐

3. N/A ☐

7 How long did the relationship last? (Months)

1. One month
2. Two months
3. More than two months
4. N/A

8 Who decided to end the relationship? (N/A if relationship has not ended)

1. Me ☐ 4. Other ☐Specify.....

2. Partner. ☐ 5. Not Applicable☐

3. Both ☐

9 How would you describe your relationship with your current partner?

1. Casual friendship ☐ 4. Others☐……..

2. Serious with no marriage intention☐ 5. Not Applicable☐

3. Important/might lead to marriage ☐

10. And how do you think your partner would describe his/ her relationship to you?

1. Casual friendship ☐
2. Serious but with no marriage intention ☐
3. Important /might lead to marriage☐
4. No idea☐
5. Others……
7. Not Applicable☐ **11**

Did you and your partner have any physical contact, such as holding hands, hugging or kissing?

1. Yes☐ 2. No ☐ 3. Not Applicable

12. Did you ever kiss him on the lips?

1. Yes ☐ 2. No. ☐ 3. Not Applicable

13. Have you ever had sex with him?

1. Yes☐ 2. No ☐ 3. Not Applicable

14 Have you ever been in a relationship with two or more different people at the same time?

1. Yes ☐ 2. No ☐

D. ONLY FOR THOSE WHO HAVE EXPERIENCED SEXUAL INTERCOURSE

1. **Think back to the first time you had sex with him- what would you say about the following statements**

1. I forced him to have intercourse 3. He forced me to have intercourse ☐ against his will☐ 4. We were both equally willing ☐
2. I persuaded him to have intercourse 5. N/A ☒

2 Would you say it was planned or unexpected?

3. Was this the first time you had full sexual intercourse in your life?

1. Yes ☐
2. No☐
3. N/A

4. **How old were you when you first had full sexual intercourse?**

Age…… 4 N/A☐

5 Did you regret having intercourse with him on that first time?

1. 1 yes
2. No
3. N/A

6. On that first time did you or he do anything to avoid pregnancy?

1. Yes ☐ 3 N/A☒
2. No☐

7 What method did you use? (N/A if did not use any method)

1. Condom ☐ 4. Withdrawal ☐ 7. Jelly ☐
2. Pill ☐ 5. Safe Period ☐ 8. Emergency
3. Injection ☐ 6. Foam ☐ contraception ☐

8. Did you ever discuss contraception with him?

1. Yes☐ 3. N/A☐
2. No☐

9. IF YES, did you discuss contraception before or after you first had Intercourse?

1. before first intercourse☐ 3. Never Discussed☐
2. after first intercourse ☐ 4 N/A☐

10. How often did/do you use a method to avoid pregnancy?

1. Always ☐ 3. Never ☐
2. Sometimes ☐ 4 N/A☐

11. Whose decision was it to use a method always/sometimes/never?

1. My decision ☐ 2. His decision ☐ 3. Joint decision ☐

12. What method do/did you and he mostly use?

1. Condom ☐ 6. Foam ☐ 10. Other Specify……..
2. Pill ☐ 7. Jelly ☐
3. Injection ☐ 8. Emergency contraception ☐
4. Withdrawal ☐
5. Safe Period ☐ 9. N/A☐

13. Where did you or he get this method from?

1. Shop ☐ 3. Gov't Clinic/Health Center/Hospital☐ 4. Private Doctor/Nurse/Clinic ☐
2. Pharmacy☐
5. Friend ☐ 6. Other ☐(Specify)..... 7. N/A ☐

14 Have you ever been pregnant in any of your relationships?

1. Yes ☐ 3 N/A☐
2. No☐

15 If yes .What happened to the pregnancy?

1. Currently pregnant☐ 3. Miscarriage ☐ 6. Live birth but died later ☐
4. Live birth ☐
2. Abortion ☐ 5. Still Birth.☐ 7 N/A

E. SEXUAL RELATIONSHIPS

1. Some young people are forced to have sexual intercourse against their will by a Stranger, a relative or an older person. Has this ever happened to you?

1. Yes ☐ 2. No ☐

2 Some young people have sexual intercourse just at once perhaps after a party or after drinking has this ever happened to you?

1. Yes☐ 2. No ☐

3 Did you use any form of contraception in the process?

1. Yes☐ 2. No ☐ 3. Not Applicable☐

4 Some young people give/receive money or gifts in exchange for Sex. Has this ever happened to you?

1. Yes☐ 2. No☐

5 Did you use any form of contraception in the process?

1. Yes☐ 2. No ☐ 3. Not Applicable☐

6 Some people are usually attracted to the same sex (HOMOSEXUAL)**. Have you ever had this experience?**

1. Yes☐ 2. No☐

7. Have you ever had any sexual contact, such as hugging, kissing, touching, stroking or
Sexual intercourse with some one of the same sex?

1. Yes☐ 2. No☐

F. THIS PART IS FOR ONLY THOSE WHO HAVE NEVER EXPERIENCED SEXUAL INTERCOURSE.

People have mixed reasons for not having intercourse. Which of the following applies to you or not.

1. I don't feel ready to have sex

1. Applies☐ 3 Don't Know☐

2. Does Not Apply☐ 4 N/A☐

2. I have not had the opportunity

1. Applies☐ 2. Does Not Apply☐ 3 Don't Know☐

4 N/A☐

3. I think that sex before marriage is wrong

1. Applies☐ 3 Don't Know☐

2. Does Not Apply☐ 4 N/A

4 I am afraid of getting Pregnant

1. Applies☐ 3 Don't Know☐

2. Does Not Apply☐ 4 N/A☐

5 I am afraid of getting HIV or other STIs

1. Applies☐ 3 Don't Know☐

2. Does Not Apply☐ 4 N/A

6. Do you feel pressure from others to have sexual intercourse?

1. Yes☐ 2. No☐

7. If yes,

1. Great deal☐ 3. None☐

2. Little☐ 4 N/A

8. From whom do you feel pressurized?

1. Friends☐ 4. N/A☐

2. Family ☐ 5. Other☐:

3. Partner/Special friend☐ Specify.....

G. KNOWLEDGE AND EVER USE OF CONTRACEPTIVE METHODS.

Questions about contraception- meaning, ways in which men and women can avoid getting pregnant or prevent STIs.

1. Which of the following contraceptive methods have you heard of?) (Tick as many as apply)

1. One method known 2. Two methods ☐ 4. None☐

☐ 3. More than 2☐

2 Which of these methods do you think is most suitable for young people?

1. One method known
☐
2. Two methods ☐
3. More than 2☐
4. None☐

H. USE AND PERCEPTION OF HEALTH SERVICES

1 Have you ever visited a health facility for any kind of service or information on?

Contraception, pregnancy, abortion or STI?

1. Yes ☐
2. No ☐

2 When you last saw a doctor or a nurse, what was your reason for going?

1. Contraception☐
2. STD ☐
3. Pregnancy test☐
4. Abortion☐
5. Gynecological exam☐
6. MCH ☐
7. Other ☐(Specify).....
8 Never visited

3. What was the attitude of the attending health worker towards you?

1. Very corporative☐
2. Corporative ☐
3. Indifferent ☐
4. Not welcoming☐
5. N/A ☐

4 Did the doctor or nurse talk to you about the following?

a) Contraception? Yes ☐ No. ☐ N/A☐

b) Sexually Transmitted Diseases?

Yes ☐ No. ☐ N/A☐ **c)**

Pregnancy?

Yes☐ No. ☐ N/A☐

5 Did you feel comfortable enough to ask questions?

Yes☐ No. ☐ N/A☐

6 Were the questions answered adequately?

Yes☐ No. ☐ N/A☐

7 Was there enough confidentiality?

Yes☐ No. ☐ N/A☐

THANK YOU FOR TAKING PART