Sexual Behaviours and Contraceptive Use among Adolescents in Kintampo, Ghana

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Ghana

48th International Course in Health Development
September 19, 2011-September 7, 2012

KIT (ROYAL TROPICAL INSTITUTE)
Development Policy & Practice/
Vrije Universitiet Amsterdam

Sexual Behaviours and Contraceptive use among Adolescents in Kintampo, Ghana.

A thesis submitted in partial fulfilment of the requirement for the

degree of Master of Public Health

by

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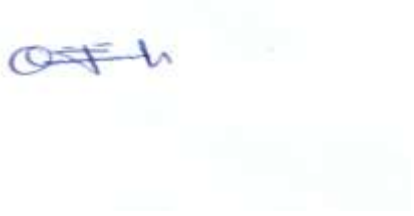
Ghana

Declaration:

Where other people's work has been used (either from a printed source, internet or any other source) this has been carefully acknowledged and referenced in accordance with departmental requirements.
The thesis (**Sexual Behaviours and Contraceptive use among Adolescents in Kintampo, Ghana)** is my own work.



48th International Course in Health Development (ICHD)
September 19, 2011 – September 7, 2012
KIT (Royal Tropical Institute)/ Vrije Universiteit Amsterdam
Amsterdam, The Netherlands.
September 2012

Organised by:
KIT (Royal Tropical Institute), Development Policy and Practice
Amsterdam, The Netherlands

In co-operation with:

Vrije Universiteit Amsterdam/Free University of Amsterdam (VU)
Amsterdam, The Netherlands

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List of abbreviations

AIDS	Acquired Immune Deficiency Virus
CHPS	Community Based Health Planning Services
GNPC	Ghana National Population Council
GDP	Gross Domestic Product
GNI	Gross National Income
HIV	Human Immune Deficiency Virus
ICPD	International Conference on Population and Development
IEC	Institutional Ethics Committee
IE&C	Information Education and Communication
JDHMT	Jema District Health Management Team
KHDSS	Kintampo Health and Demographic Surveillance System
KHRC	Kintampo Health Research Centre
KMHD	Kintampo Municipal Health Directorate
KSDHD	Kintampo South District Health Directorate
MMR	Maternal Mortality Ratio
NGO	Non Governmental Organisation
OPD	Out Patient Department
RTIs	Reproductive Tract Infections
SRC	Scientific Review Committee
SRH	Sexual and Reproductive Health
STIs	Sexually Transmitted Infections
UN	United Nations
WHO	World Health Organisation

Acknowledgements

To God be the glory great things He has done. I thank the almighty God, to whom I owe my life for His guidance, providence and protection for me throughout my stay in the Netherlands and my studies at KIT.

I also express my heartfelt gratitude to the director, management and advisory committee of the Kintampo Health Research Center, for grants for the conduct of this survey, the opportunity to take time off work for further studies and the privilege to use part of the data collected for my thesis.

I especially thank my thesis advisor and back stopper, for their tireless support and guidance, in bringing this piece of work to a success.

My next appreciation goes to Nuffic, for the financial assistance to undertake this course.

I am grateful to my family and loved ones back home for their prayers, encouragement and support for me throughout this one year stay away from them.

I thank my colleagues, the 48th ICHD students for making the stay a worthy one, through the various learning experiences shared and the fun times we had together.

I thank the course organisers, and facilitators for this eye opening experience.

Abstract

Introduction: unsafe sexual behaviour among adolescents has drawn attention from all spheres of life because it makes them susceptible to different sexually transmitted diseases, unwanted pregnancies sometimes leading to abortion and a host of other health related problems.

Objective: To analyse the sexual and reproductive health, particularly sexual activity and contraceptive use among adolescents in Kintampo, Ghana, to contribute to the limited data on adolescent sexual and reproductive health and provide recommendations.

Method: A cross sectional survey among adolescents aged 15 to 19 was conducted in Kintampo, Ghana from October 2010 to May 2011. It used both qualitative and quantitative methods. A review of the relevant literature was also done.

Results: 793 male (43.1%) and female (56.9%) adolescents participated in the study. Generally, knowledge of various elements of reproductive health apart from pregnancy was good at almost a 100%. Of all adolescents interviewed, 42% have been in a relationship. Of those, 95.2% have had sex; 90.4% (males) and (94%) females. Females had 1.3 times the odds of having sex compared to males. Consistent contraceptive use among adolescents was very poor (22.9%) as a result, 30.2% of adolescents have been pregnant with 34% of it ending in abortions and 42.5% live births. Results from the literature review were similar to the survey.

Conclusion: Adolescent's knowledge on pregnancy and contraception is limited. Unsafe sex is practiced among the sexually experienced adolescents.

Recommendation: A research for adolescents who have never been to school and for teachers is needed. Training and use of peer educators among other things are recommended to the Kintampo District health management team, the education service, and other stakeholders.

Key words: Adolescents, Sexual and Reproductive health, Contraceptives, Ghana, Kintampo.

Word Count: **12,709**

Introduction

Adolescence is a stage in life when one grows from childhood to adulthood. This indeed can be a very challenging phase of life. Adolescents have the responsibility of identifying themselves. Their youthful exuberance predisposes them to lots of exploration and risk taking in all aspects of life (WHO 2009). These ideas if not carefully coordinated and guided may fall out of hands, leading to devastating consequences.

Adolescents have access to loads of information from all spheres of life. But more so, thanks to the electronic and print media (Seme & Wirtu 2008). With their sense of curiosity at its peak, they will not hesitate to put into practice whatever they hear, see or read. This leaves adolescents at the mercy of unwanted pregnancy, abortion and abortion complications, sexually transmitted infections/HIV (with a prevalence of 2.3 in 2002 among 15-19 year olds in Ghana),early motherhood, and school drop out to mention but a few (Awusabo-asare & Abane 2004). Adolescents who suffer these ills will not be able to reach their full productive capacity (Suva, 2006). A study among single adolescents from two regions in Ghana showed that, out of every three female adolescents who have experienced sexual intercourse, more than one of them have experienced pregnancy (Awusabo-asare & Abane 2004).

All over the world, about 80 million unwanted pregnancies take place annually. More than half those are aborted (Sedgh et al., 2012; Glasier et al., 2006). Almost half of all abortions done are unsafe (Sedgh et al. 2012). Nearly all unsafe abortions (98%) occur in less developed countries, and 40% of that are among the less than 25 year olds(Sedgh et al. 2012). Every eight minutes, a woman's life is lost as a result of an unsafe abortion (Singh et al., 2009). The Word Health Organisation (WHO) has stated that, a lot of adults die early because of the behavioural choices they made in their adolescence (WHO, 2009).

My passion for Adolescent Reproductive health stems from the fact that, adolescence is a very vulnerable stage in life. Adolescents need help. They have very scanty knowledge on sexual and reproductive health, especially pregnancy, contraceptives and STIs (Awusabo-asare & Biddlecom 2006; Okereke, 2010; Bankole et al., 2007).

These concerns ignite in me the desire to contribute to adolescent reproductive health in Kintampo through research to identify needs of adolescents in this area, to inform future interventions.

My undergraduate training was in Population and Family Life. After my training, I joined the Kintampo Health Research Center. I had no opportunity to be involved in any study on reproductive health apart from studies I conducted during my undergrads'. This is because at the time I joined the Research Center, Reproductive Health was not one of the core

research areas. This did not kill my passion for the subject. I went for a two months short course on Reproductive Health including HIV/AIDS at the Mahidol University in Thailand and came back with a proposal entitled "Young People's Sexual and Reproductive Health: a case study of Kintampo North and South".

The protocol for this study was chosen among 6, out of the 18 competing protocols for a grant opportunity for young scientist at the Research Center. I was the lead investigator, under the mentorship of other Senior Research Fellows.

The conduct of this study led to the inclusion of Reproductive Health to the core components of the key research areas in the Kintampo Health Research Center.

The primary objective of my thesis therefore is to analyse the sexual and reproductive health, particularly sexual activity and contraceptive use among adolescents in Kintampo in order to contribute to the limited existing data on adolescent sexual and reproductive health, for further research to inform future interventions.

Chapter 1: Background information

1.1 A brief background on Ghana

Ghana is a Sub- Saharan African country with a total land area of 238,537 square km and a population of about 24million (51.3% females and 48.7% males). The annual population growth of the country is 2.4%, (Ghana statistical service, 2012) with a life expectancy of 64 years at birth. It has a Gross Domestic Product (GDP) of $39.2 Billion and a Gross National Income (GNI) per capita of $1,410 (World Bank, 2011). Ghana is endowed with natural resources such as gold, timber, diamond, petroleum bauxite, to mention but a few. It has a youth literacy rate of 74.8% (82.7% males and 67.1% females). About 69% of Ghanaians are Christians, and the other religious affiliates make up 31%. English is the official language (Ghana Statistical Service, 2012). Ghana's infant mortality rate is 51.3 per 1000 births (GOG, 2012). There are ten administrative regions and 170 districts in Ghana. Figure one below represents the map of Ghana.

Figure 1: Map of Ghana

1.2 Background information on Kintampo.

The Kintampo District is one of the 22 districts in the Brong Ahafo region of Ghana. It was split up in 2003, making it two separate administrative units; Kintampo North and Kintampo South (Ghana Districts 2006). The Kintampo Health and Demographic Surveillance System (KHDSS) from where most of these background information come still collects data for the two districts together. Hence most of the issues will be combined and where data from other sources are available, those figures will be differentiated.

1.2.1 Geography and location.

Kintampo is situated in the centre of Ghana, in the Brong Ahafo region with an area of almost 7000 Square Km and a population of approximately 96,358 in the north and 93,600 in the South. 51% are females and 49% are males. The area is multi-ethnic, made up predominantly of the Mos and the Akans. The Akans, 54%, are the majority and "Twi" their language is spoken and understood by a majority of the population (KHRC, 2010; Ghana Districts, 2006).

1.2.2 Religious affiliations.

A majority of the population (75%) are Christians. Muslims are 18% while the Traditional and other forms of religious worshipers make up the remaining 7% (KHDSS, 2010).

1.2.3 Educational attainments.

Educational level is low in both the Kintampo North and South Districts among the adult population. 48.6% of the male and 55.2% of the female adult population have never been to school. About 3.7% of males and 3.5% of females have had preschool education. 24.3% and 23.2% of males and females respectively have only had primary school education. 16.1% males and 14.3% females have had Junior High School education while 7.3% males and 3.7% of the females have had senior high school education or higher. Among the young population, 55% of children 6 to 11 years have been enrolled. 78% males and 75% females of all 12 to 19 years have ever been to school (KHDSS, 2010). This means that, 22% males and 25% females of the 12 to 19 years who are supposed to be in school have never been to school. There is also a high dropout rate of more than 17.3% (14.8%males and 19.7% females) from the junior high to the senior high school. Some reasons for this include abandoning school to support parents in their economic activities or to due to pregnancy or to get married among the females especially (Ghana Districts, 2006).

1.2.4 Economic activities.

About 63.8% of the people in this area are farmers, labourers or domestic workers. The farmers engage in farming of predominantly maize, yam and to some extent, livestock. 31.1% of the population are in commerce, industry and services and 5.1% are unemployed. Food takes the bulk of all household income, 42.5%. The lowest percentage 3% is spent on education. 17.3% of the population can be described as most poor (earn less than a dollar a day), 20.2% can be described as more poor, 21.3% can also be described as poor, 16.4% can also be described as least poor and only 24.9% are described as least poor. The rest, 9.9 are rich (KHDSS, 2010).

1.2.5 Health situation

Majority of morbidities and mortalities are due to malaria. The top five causes of Out Patient Department (OPD) attendance are malaria, upper respiratory tract infections, Anaemia, worm infestation and pneumonia (KMHD, 2011). Other common causes of morbidities and mortality include sexually transmitted infections (STIs), Human Immunodeficiency Virus/Acquired Immunodeficiency Syndrome (HIV/AIDS), acute respiratory tract infections and skin infections (Makelele, 2005; Ghana districts, 2006). Some health indicators include a crude death rate of 7.8/ 1000 person years and infant mortality ratio of 39/1000 live births (KHDSS, 2009) It has a high maternal mortality ratio (MMR) of 450/100,000 live births compared to a national ratio of 214/100,000 live births (Ghana Districts, 2006). Reproductive health services that are provided in the main stream hospital include family planning, STI/HIV/AIDS prevention and management, post abortion care, prevention and management of cancers of the reproductive systems (KMHD, 2009; KSDHD, 2009). In addition to this, some staff from the District Health Management Team (DHMT) go for school visitation to provide health talk to the students. Issues discussed include oral health, adolescent development and reproductive health. Radio health talks are also done and the issues discussed include reproductive health. This is targeted at the general population (KMHD, 2009; KSDHD, 2009).

1.2.6 The Health system.

The study area has two district government hospitals; four government owned health centers, a few Community-based health planning services (CHPS) compounds, a private clinic and a private maternity home. Hospitals serve as the first referral point for other facilities (KHDSS, 2010) Health staffs are woefully inadequate. In the north for instance, the

doctor to patient ratio is 1:45,432 compared to a national ratio of 1: 20,000 (Ghana Districts 2006).

1.2.7 Antenatal and family planning services.

Antenatal coverage is 96.7% in the North and 67.4% in the South. However, supervised delivery in a health facility is about 54.2% and 27.6% in the North and South respectively (KHDSS, 2010). This is so because, the North is more developed and health services though limited everywhere, are more available there, compared to the South. Therefore, the tendency to seek for services (determined by availability) is likely to be higher (KMHD, 2010; KSDHD, 2010). Adolescents less than 18 years of age have always contributed about 3% to all births that occur in Kintampo for the past six years thus, from 2005 till date (KHDSS, 2010). Antenatal services are provided for both adolescents and the adult population in the main stream hospital. Adolescents who go for antenatal receive information and education on sexuality and reproductive health issues including family planning. Unfortunately, there is lack of data on the trend and use of contraceptives among adolescents in Kintampo.

CHAPTER 2: Problem statement, Justification and Methodology.

2.1 Statement of the problem.

Unsafe sexual activity among adolescents is a problem and has drawn attention from most parts of the world, including Ghana (Fiji S, 2005).

In Ghana, sexual intercourse is expected to occur only within marriage circles (Awusabo-asare & Biddlecom 2006). Age at first marriage has increased from 18.3 for females and around 25 years for males in 1988, (National Population Council 2004) to around 21.4 and 20.9 years for urban and rural dwelling females respectively and 26.1 for urban and 24.9 for rural males (Ghana statistical service, 2008). A lot of people especially females tend to spend more time in school now than ever. This increases their age at first marriage. This situation has increased conditions for premarital sex. In a study conducted in Ghana among adolescents , it was discovered that, 30% and 16% of the females and males aged 15 to 19 respectively have had sex with a majority of it being premarital (Awusabo-asare & Biddlecom 2006).

According to the report of the Ghana National Demographic and Health Survey 2008, of the 15 to 19 year olds interviewed, among those who have had sex, 73.6% of the females and 96.2% of the males had sexual intercourse with someone who was neither their spouse nor a co-habiting partner and 19.4% of them were in concurrent relationships (Ghana statistical service, 2008).

In the study by Karim et al (2003), only 18% and 27% of adolescent males and females who have had sexual intercourse mentioned that they used condoms in their maiden sexual encounter. Besides that, consistent contraceptive use was recorded among just 24 and 20 percent of males and females respectively, with reference to their current relationship (Karim et al. 2003).

Unprotected premarital sex among adolescents (girls in particular) predisposes them to unwanted pregnancies, abortion complications or sexually transmitted infections (Okereke 2010). From January 2009 to May 2010 about 3% of adolescents age (15-19 years) in Kintampo North got pregnant though they were unmarried (antenatal attendants) (KMHD, 2010). Unwanted pregnancy and early motherhood has the propensity to bring to a halt one's education with untoward effects on subsequent employment opportunities. This situation results in negative consequences for the quality of life of both mother and child. It also makes her less productive to be able to contribute fully to the socio-economic development of the country (Okereke 2010). The pregnant adolescent who does not give birth and decide to abort the pregnancy may bring upon herself long term effects such as infertility arising from abortion complications or even death, if it was an unsafe abortion

(National Population Council 2004). Presently among those living with HIV/AIDS in Kintampo North, 27% are teenagers (KMHD, 2010).

Unfortunately, the subject matter of sexual and reproductive health is usually not discussed at home due to social, cultural and religious reasons (Glasier et al.,2006; Okereke, 2010). Also, adolescents' ideas are usually not taken into account in the planning of programmes and services for them (Awusabo-asare & Abane 2004).

2.2 Justification.

Within the frame-work of World Health Organisation's (WHO) definition of Health as a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity, reproductive health addresses the reproductive system, its functions and processes in all stages of life. Reproductive health therefore implies that people are able to have a satisfying and safe sex life and that they have the capability to reproduce and the freedom to decide if, when and how often to do so (UN ICPD, 1994).

This suggest that, adolescents have the right to full sexual and reproductive health information and services which should be convenient for them, and tailored towards their needs, (Awusabo-asare & Abane 2004; National Population Council, 2000) given the untoward effects of pre marital and unsafe sexual behaviours. However, the only adolescent reproductive health interventions carried out in the district are occasional health talks held for schools, beauticians, churches, and associations (KMHD, 2010). In addition to this, there are no youth friendly centers in this area, where adolescents can conveniently and confidently seek for services.

Most importantly, there is scarcity of data on the sexual behaviours, the extent and trend of contraceptive use among adolescents in Kintampo.

Because no research of this kind has ever been conducted in Kintampo, it was prudent to carry out a local survey to ascertain the sexual behavior of adolescents and contraceptive use amongst them, which will serve as a starting point for further extensive research leading to appropriate interventions.

2.3 Objectives of the thesis

2.3.1 Primary objective.

To analyse and describe the sexual and reproductive health, particularly, knowledge, sexual activity and contraceptive use among adolescents in Kintampo in order to contribute to the limited existing data on adolescent sexual and reproductive health, for further research and to inform future interventions as well as policy and practice.

2.3.2 Specific objectives

1. To describe the general knowledge of and sources of information on sexual and reproductive health and the most preferred sources information among adolescents in Kintampo.

2. To describe the sexual behaviours of adolescents and the reasons for it among adolescents in Kintampo.

3. To illustrate the knowledge, and use of contraceptives among adolescents in Kintampo.

4. To compare the results of the survey with results from the literature to identify similar and contrasting outcomes.

5. To make recommendations to the District Health Management teams, and the Ghana Education Services and other stake holders in Kintampo for improving Sexual and Reproductive Health of Adolescents in the districts and for future research and interventions

2.4 Methodology

Two methods were used for this thesis. A cross-sectional survey with both qualitative and quantitative data collection techniques and a literature review.

2.4.1 Literature review

Relevant literature on the subject matter were searched from the Guttmacher Institute, PUBMED, Medline, the WHO, UNICEF, UNDP web sites, Google, and the KIT library and were reviewed.

2.4.1.1 Keywords

Ghana adolescent reproductive health policy, adolescent reproductive health, adolescent contraceptive use, adolescent's sexual behaviour.

Some results from the survey (quantitative and qualitative) have been combined with the reviewed literature for the discussion.

2.4.2 Survey

2.4.2.1 Study area description.

The study was conducted in the Kintampo North and South Districts. The Kintampo Districts are under a Health and Demographic Surveillance System (KHDSS), which undertakes registration of all residents in the area. Data on health, pregnancies, births, deaths and migration (in/out) at six (6) monthly intervals are also collected. All compounds have been digitized making identification of individuals to their compounds very

easy. As at December 2010, the KHDSS had registered 35,026 adolescents (10-19) years. Of those, 51.8% were males and 48.2% were females (KHDSS, 2011).

2.4.3 Survey design

The conduct of the survey was in response to a call for proposals by the small grants initiative of the director of the KHRC for the development of young scientist. I was the principal investigator. Data collection started from the end of 2010 and was completed in early 2011. Preliminary analysis was done but no report was written because the time for this coincided with my coming for the ICHD course.

Community based field workers contacted study participants, sought consent from them and enrolled them into the study. Data collected included but not limited to information on the demographic characteristics of respondents, their knowledge on reproductive health and their sources of information including the most preferred sources, their sexual relationships, their knowledge and use of contraceptives, and their perceptions on some gender norms and expectations.

The survey was conducted among 793 male and female adolescents, aged 15-19. The aim of the survey was to ascertain the sexual and reproductive health situation of the adolescents in Kintampo and to explore the perception of health service providers on tailoring sexual and reproductive health care to the needs of adolescents in the Kintampo. An eight paged structured questionnaire which was adapted from an adolescent reproductive health data collection tool by the UNDP/UNFPA/ WHO/World Bank (Cleland, 2001) and pre-tested, was used for the data collection. Instruments were close ended questions and data was collected by trained community based field workers. In addition, seven focus group discussions were conducted. Interviews were guided by a modified and adapted qualitative instrument developed by Roger Ingham and Nicole Stone on "In-depth interviews and Focus Group Discussions on Partner Selection, sexual behaviour and risk taking for adolescents" (Ingham & Stone 2001). Interviews were tape recorded and transcribed verbatim.

Most data collection procedure and all other protocols were followed. The only problem was that, the initial plan was to do a randomised sampling. The field workers rather did convenient sampling from schools because that was much easy for them to meet their targets.

The odds ratios were used for comparing proportions of some the exposure variables at a 95% confidence level among males and females. STATA version 11 was used to do the rest of the analysis. Cross tabulation was used to explore relationships between the exposure and outcome variables and the Pearson Chi Squared test was used to test for strength associations.

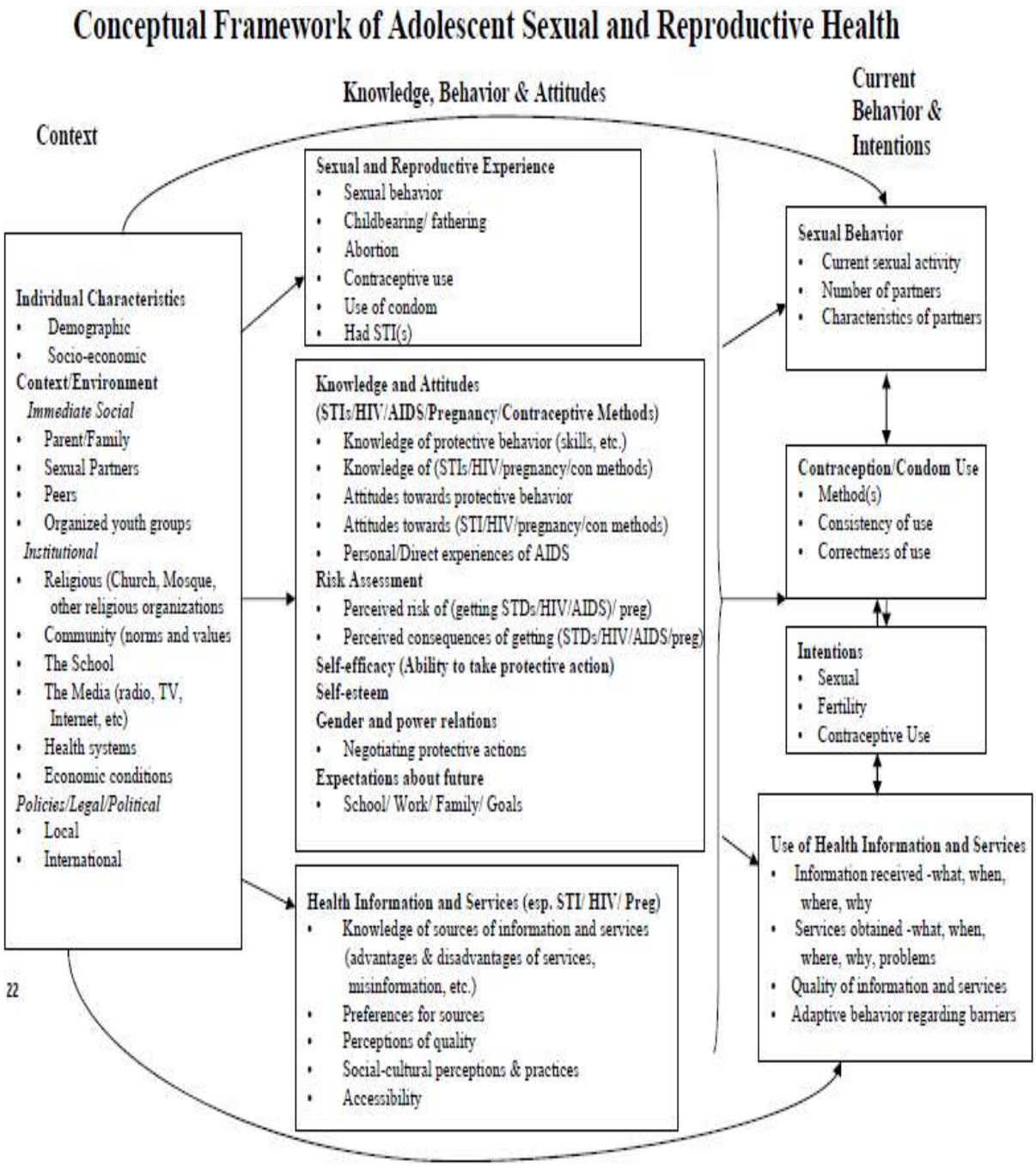
2.4.4 Ethical issues.

Ethical clearance and scientific approval for this study was from the Institutional Ethics Committee (IEC) and the Scientific Review Committee (SRC) of the Kintampo Health Research Center respectively. In order to guarantee the safety and confidentiality of study participants, informed consent was sought from the adolescents.

Details of survey design is in **annex** 1.

2.4.5 Conceptual frame work for thesis

Figure: 2 Conceptual Framework



source: the Guttmacher institute (Awusabo-asare & A. Biddlecom 2006)

2.4.5.1 Description of Conceptual framework.

This model was developed by the Guttmacher Institute, to analyse the sexual and reproductive health of adolescents. I chose this model because, it is very comprehensive, and includes all possible inter relational concepts that have the tendency to influence an adolescent's sexual and reproductive health life, as opposed to the various behavioural change models that I have described in **annex 3**. It has three broad interrelated concepts namely, The Context, Knowledge, Behaviour & Attitudes, and lastly, Current Behaviour and Intentions.

All these broad concepts have sub variables that influence the adolescent in one way or the other to adopt an approved behavior or otherwise, regarding their sexual and reproductive health. The Context influences Current Behaviour & Intensions through Knowledge, Behavior & Attitudes. Current Behaviour & intentions are also interrelated and are influenced by each other. Because this model is very elaborative, and only developed after the field study, the data available will not make it possible for me to analyse every detail of the framework in my thesis.

The discussion part of this thesis will be based as much as possible on these concepts, where the available data makes it possible in relation to the study objectives and literature review.

Chapter: 3 Literature Review

The review of literature is done in line with thesis objectives and includes some polices of government on ASRH.

3.1 Government policy on adolescent reproductive Health.

Ghana has a policy on Adolescent Reproductive Health. The objectives of this policy among other things are to "promote programmes that will improve the knowledge of adolescents on sexual and reproductive health which will in turn guide them to develop socially acceptable and responsible attitudes towards sex and sexuality" it also aims at supporting programs and research to curb the incidence of unwanted pregnancies, and STIs and all ills associated with poor reproductive health. While providing the needed education and information an (National Population Council 2004). The policy seeks to use schools as agents of socialisation to educate students on sex. Sex education therefore forms part of the school curriculum. It is incorporated in the general science and social studies curriculum of the primary through senior high schools (Awusabo-Asare & Biddlecom, 2006). Provision for out of school adolescents have also been made through various means such as radio talk shows. So far some of the strategies put in place to help achieve the policy targets set by the Ghana National Population Council on Adolescent Reproductive Health (National Population Council 2004) such as establishing youth friendly clinics have been implemented in some of the big cities in Ghana However, Kintampo and other rural Ghanaian communities are yet to see the implementation of most of them (Awusabo-Asare & Biddlecom, 2006)

Several studies on adolescent sexual and reproductive health have been done particularly the ones assessing their knowledge on some sexual and reproductive health variables, contraceptive use, adolescent fertility, to mention but a few. These particular studies under review were chosen because of the following reasons. The adolescents in Ghana and those in other African countries have some similarities in the socio cultural and religious beliefs and the political and economic settings are also similar. Secondly, the study population, methods and objectives of these studies under review and that of the survey are similar. Particularly with the surveys conducted in Ghana, because the adolescents live in the same country with similar, socio cultural and religious beliefs and practices, and the under the same political dispensation, their behaviour is likely to be similar. Most importantly was to compare what is happening in Kintampo to the other parts of Ghana and other parts of Africa. There could however be a bias regarding the studies done only in urban areas compared to this survey because of a probable variation between these two groups of adolescents. Also the kind of sampling technique used, the type of questions, the way they were asked and answered can pose a bias.

3.2 General knowledge of and sources of information on sexual and reproductive health among adolescents.

Adolescents acquire knowledge on SRH from different sources. These include teachers, friends, the media, health workers, etc. The depth and appropriateness of the information they acquire is worth knowing to be able to fill in the gaps.

A study conducted by Awusabo et al. (2006) on adolescent sexual and reproductive health in Ghana among 12 to 19 year olds showed that there were gaps in the knowledge of adolescents on some reproductive health issues. Though adolescents knew that there are specific days in the month when a woman is likely to get pregnant, (78.9% females and 67.0% males) only 26% knew exactly when this was. 60% and 53% of females and males respectively (15-19 years) knew that when a woman has her first sexual intercourse, it is possible for her to get pregnant. As many as 58% and 45% of females and males had no clue as to whether a woman could get pregnant when she has sexual intercourse, while in a standing position. 56% of adolescents did not know that a woman can get pregnant even if she washes herself right after intercourse (Awusabo-asare & A. Biddlecom 2006). In this study, the most preferred source of information on sexual and reproductive health was the teacher.

Almost all adolescents have heard about HIV/AIDS (97%).This notwithstanding, a number of them (24% of females and 21% of males) do not know exactly how one can get infected (Tweedie & Witte 2000).

Apart from HIV, knowledge on other STIs is also very important and worth knowing given the negative consequences they pose if they go untreated. Knowledge on this was not very much. The most common STIs known by adolescents aged 15 to 19 are Gonorrhoea and Syphilis. Also adolescents who get infected with STIs do not usually seek health care from the formal sector. Some of the reasons given for these are the fear of being seen as promiscuous or that the infection does go by itself. (Tweedie & Witte, 2000; Okereke, 2010)

3.3 Adolescents' sexual behaviours and reasons for it.

Most adolescents in Ghana are not abstaining from premarital sexual activity. A lot of studies buttress this fact. A study among 1782 15 to 19 year olds on the sexual behaviour and contraception among unmarried adolescents and young adults in Grater Accra and Eastern Regions of Ghana showed that 67% and 78% of the males and females respectively have engaged in premarital sex (Agyei et al., 2000).

In their study among the 704 12 to 24 unmarried youth, Glover et al, (2003) discovered that 52% of adolescents interviewed had experienced sexual intercourse and the odds of finding someone who had had sex among the females was 1.6 times the odds of finding someone among the

males. About 33% of them have been pregnant before (Glover et al., 2003).

In study conducted in 1993, sexual activity among adolescents in Ghana back then was high. 86% of all interviews had had sex with 42% of them being prior to their 16th birth day (Ankomah et al., 1993)

Tweedie and Witte (2000) in the Ghana Youth Reproductive Health Survey Report of 1999 stated that, of the adolescents who had had sex, 38% and 53% of females and males in the same order, have been in a sexual relationship with two to three people, since their sexual life began. In the same study, while 1% of both males and females said ever been involved in homosexuality, 5% and 12% of males and females respectively, stated that they have ever exchanged sex for money (Tweedie & Witte, 2000).

In another study by Karim et al. (2003) on the reproductive health risk and protective factors among unmarried youth in Ghana, it was found that 36% of males and 41% of females interviewed had had sex. Of them, (4% and 11%) of females and males in that order, were involved with more than one sexual partner, three months before the survey was conducted (Karim et al., 2003).

Sexual activity among unmarried young people is not peculiar to Ghana. Bankole et al. (2004) reported in their paper "the knowledge of correct condom use and consistency of use among adolescents in four countries in sub Saharan Africa" found that among adolescents aged 12 to 19 in all four countries, a number of them were engaged in sexual activities. 29% and 15% among Ghanaian females and males respectively, 37% females and 60% males in Malawi, 45% and 34% for females and males respectively in Burkina Faso, and 48% females and 49% males in Uganda (Bankole et al. 2007). It seems less in Ghana compared to the others.

Seme and Wirtu (2008) also discovered, in their study of Ethiopian adolescents aged 10 to 19, that 21.5% of the interviewees had had sex. The average age at which the adolescents engaged in sexual activity was 16.2 years for females and 15.2 for males (Seme & Wirtu 2008).

Another study in Nigeria by Okereke (2010) indicated that 50.8% of all the adolescents interviewed had experienced sexual intercourse. 30.2% of them had experienced unplanned pregnancies. In that study, adolescents perceived their engagement in sexual intercourse as in being in consonance with the current trend of modernism (Okereke, 2010).

Adolescents have several reasons why they have sex and these reasons run through most sexual and reproductive health studies conducted among adolescents. These include the fact that adolescents "felt like having sex", "to satisfy their curiosity" and "for money or gifts" (Seme & Wirtu 2008; Nyovani et al. 2007; Awusabo-Asare et al., 2006).

Sexual intercourse among adolescents is also associated with poverty as indicated by Nyovani et al. (2007) They found that female adolescents from poorer families have 2.7 times the odds of having premarital sex, compared with those from well to do families (Nyovani et al. 2007).

3.4 Knowledge and use of contraceptives among adolescents.

Knowledge on contraceptives apart from the male condoms is usually low among adolescents. In a report on the 2004 Youth reproductive health survey among (12-19 year olds), Awusabo-Asare et al (2006) said that, adolescents (90%) knew at least one modern method of contraception. This notwithstanding, knowledge on specific methods apart from the male condom was not encouraging. Knowledge of the pill was 52.7% and 52.5% among females and males in that order. Intra Uterine Device was known by 23% and 23.1% of females and males respectively. 56.5% of females and 55.5% of males were also familiar with the injectables. On implants, 18.7% and 17.6% knew about it. Knowledge on Emergency Contraceptive Pill was 18.4% and 20.1% for females and males respectively. The male condom had the highest score of 87.9% and 90.6% among females and males, correspondingly. The least score recorded was for Foam/Jelly 11.8% for females and 15% for males. In the same study, 60% of females and 58.5% of males answered in the affirmative when they were asked whether they have ever discussed contraceptives with their partners (Awusabo-asare & Biddlecom 2006).

In the study by Karim et al (2003), only 18% and 27% of adolescent males and females who have had sexual intercourse mentioned that they used condoms in their maiden sexual encounter. Besides that, consistent contraceptive use was recorded among just 24% and 20% of males and females respectively, with reference to their current relationship (Karim et al. 2003).

Another study conducted among 12 to 19 year olds in Ghana, Burkina, Malawi and Uganda by Biddlecom et al. (2007) revealed that between 43-65% of the females have used contraceptives before whiles that of the males is between 50-66%. In both cases, the male condom was the most contraceptive method used. But in the three other countries apart from Ghana, 89.2% of the adolescent females were more likely to use traditional methods (Biddlecom et al. 2007).

Krugu and his colleague found in their study among senior secondary school students in the Upper East Region of Ghana that, the adolescent girl did not have enough self efficacy to negotiate condom use. Males and females both seemed to believe that once there is the element of trust in the relationship, condoms were not necessary and so it is difficult for a female to go and buy a condom because she will be perceived as a bad girl. Much the same way, a male will reject a condom from a female partner because that will be enough reason to suspect her of cheating on him (Rondini & Krugu 2009).

Adolescents do not use contraceptive methods because they are either embarrassed, afraid, or shy to go get it or they trust their partner, or they feel safe (Rondini & Krugu 2009; Awusabo-asare & Biddlecom 2006; Biddlecom et al. 2007).

Chapter 4: Results of the survey and FGDs.

Results of this survey are presented in line with the objectives of this thesis.

4.1 Basic characteristics of respondents.

Table 1: Socio-Demographics of respondents

Variables (n=793)			Characteristics		
	n	%		n	%
Sex			Muslim	136	(17.2)
Male	342	(43.1)	Traditional	18	(2.3)
Female	451	(56.9)	Other	11	(1.4)
Age (years)			Ethnicity		
15	187	(23.6)	Akan	303	(38.2)
16	157	(19.8)	Mo	173	(21.8)
17	147	(18.5)	Dagarti/frafra	131	(16.5)
18	178	(22.5)	Fulani	5	(0.6)
19	124	(15.6)	Ga/Ewe	5	(0.6)
Ever attended school			Gonja/Dagomba	43	(5.4)
Yes	783	(98.7)	Konkomba/Basaare	25	(3.2)
No	10	(1.3)	Bimoba	5	(0.6)
Educational level			Sisala/Wala	77	(9.7)
None	10	(1.3)	Banda/Pantra	9	(1.1)
Primary sch.	168	(21.2)	Other	17	(2.1)
JHS/JSS	500	(63.1)	Who respondents reside with		
SSS/SHS	114	(14.4)	Both Parents	452	(57.0)
Teacher Tr.	1	(0.1)	One parent	193	(24.3)
Marital status			Other relatives/ husbands	99	(12.5)
Married	6	(0.8)	Other guardian	14	(1.8)
Living together	10	(1.3)	Friend	4	(0.5)
Unmarried	776	(97.9)	Self/Other	31	(3.9)
Religion					
Catholic	226	(28.5)			
Protestant	219	(27.6)			
Pentecostal	183	(23.1)			

A total of 793 young people participated in the study. Of them, 43% were males and 57% females. The mean age of the respondents was 16.9. The majority of respondents 97.9% were not married. Most of them were Christians (79.2%). The Akans formed the larger group of people interviewed; 38.2%. 57% of the participants lived with both parents at the time of the survey.

98.7% of the study participants have ever been to school, with the highest educational level being the Teachers Training College. The 1.3% recorded for adolescents who have never been to school is not

representative of the adolescents who have never been to school (22% males and 25% males) in the population. The survey results can be blamed on the fact that a lot of the adolescents were conveniently sampled from schools. This has the tendency to pose a bias in the results of the study.

4.2 General knowledge of and sources of information on sexual and reproductive health and the most preferred sources information among adolescents in Kintampo.

4.2.1 Knowledge on sexual and reproductive health among adolescents in Kintampo.

Levels of knowledge on some reproductive variables were sought from the participants. Adolescents were said to have knowledge on a given variable if the question about the said variable in the quantitative instrument in annex 3 was correctly answered. Table 2 below represents this.

Table 2: Knowledge of adolescents on some sexual and reproductive Health variables

Variables	Males (n=342)		Females (n=451)		all (N=793)		OR	CI 95%
	n	%	n	%	n	%		
Knowledge on reproductive systems of men and women	258	(75.4)	352	(78.0)	610	(77.0)	1.2	0.74-0.80
Knowledge on puberty	287	(83.9)	396	(87.8)	683	(86.0)	1.3	0.83-0.88
Knowledge On pregnancy whiles menstruating	70	(20.5)	146	(32.4)	216	(27.2)	1.9	0.24-0.30
Knowledge on pregnancy at first sex	202	(59.0)	299	(66.2)	501	(63.0)	1.3	0.59-0.66
Knowledge on likelihood of pregnancy if a girl has sex by standing up	185	(54.0)	229	(50.7)	414	(52.2)	1.1	0.48-0.55
Knowledge on likelihood of pregnancy if a girl washes herself thoroughly after sex	205	(60.0)	271	(60.0)	474	(60.0)	1.0	0.56-0.63
Knowledge on relationships	236	(69.0)	375	(83.1)	611	(77.1)	2.2	0.74-0.80
Knowledge on other STIs	310	(90.6)	385	(85.3)	695	(87.6)	1.7	0.85-0.89

Adolescents were asked if they have learnt about all the reproductive health variables in table above. In general, most adolescents have learnt about all these variables. The highest level of knowledge was on STIs 87.6% of adolescents (90.6% males and 85.3% females). The second highest was puberty recording 86.5% (83.9% males and 87.9% females). However, knowledge on pregnancy and when it can occur was not encouraging among both males and females. For instance, only 27.2% of adolescents interviewed knew that a woman cannot get pregnant when she has sex while she is menstruating. This was particularly poor among males who scored 20.5% against 32.4% of their female counterparts.

As a result, females had 1.9 times the odds of knowing that a woman cannot get pregnant while in her menses compared to males. This association is significant at a 95% confidence level (CI=0.24, 0.30)

Using females as cases, the feminine gender, seem to be a risk factor for almost all these knowledge variables but of course, a positive one.

The high levels of knowledge on the reproductive systems of men and women, puberty in particular might be because they are included in the general science and social studies syllabus in schools. And because almost all adolescents are in school, they are likely to have been taught these things by their teachers. Though matters relating to reproduction are also taught in schools, issues on exactly when pregnancy can occur and the myths around it are not specifically dealt with. This therefore can possibly explain why knowledge on pregnancy and when it can occur is low. The low level of knowledge on pregnancy among males is likely due to the fact that, it is females who menstruate and when they do; their mothers and other older people educate them on a lot of things regarding menstruation. They can therefore use that opportunity to find out more on these issues, compared to the males who do not menstruate.

4.2.2 Sources of information on sexual and reproductive health for adolescents.

In both the qualitative and quantitative data collected, adolescents were asked how or from whom they usually find out about reproductive health issues.

Some adolescents mentioned that, they find out these issues from their teachers, from reading books, from friends, from their peers, from the media, parents, other older people and the health system. Below are some excerpts from the FGD.

"Sometimes, it's the teacher who teaches such things then you can ask him/her questions about it then he/she tells you what to do." (16 year old female)

"When we read books, we get some information about it." (15 year old male)

"We get information from the television or radio." (17 year old female)

"I find out from my friends." (15 year old female)

4.2.3 Most preferred sources of information on sexual and reproductive health among adolescents.

The response for this is presented in the table below.

Table 3: Most preferred source of information for adolescents

Sources N=793	Information on puberty				Information on reproduction				Information relationships			
	males n=342		%females n=451		%males n=342		%females n=451		%males n=342		% females n= 451	
n	%		n	%	n	%	n	%	n	%	n	%
Teacher	268	(78.3)	276	(61.6)	242	(70.8)	280	(62.1)	178	(52)	211	(46.7)
Friends	35	(10.2)	106	(23.5)	44	(12.8)	63	(13.9)	93	(27.2)	134	(29.7)
Books	21	(6.0)	31	(6.9)	16	(4.7)	53	(11.8)	31	(9.1)	61	(13.5)
Mother	17	(4.9)	12	(2.7)	16	(4.7)	21	(4.7)	17	(4.9)	21	(4.7)
Father	10	(2.9)	10	(2.2)	13	(2.9)	17	(3.8)	10	(3.0)	14	(3.1)
Other sources	4	(1.2)	6	(1.3)	7	(2.0)	11	(2.4)	7	(2.0)	4	(0.9)
Other relatives	3	(0.8)	8	(1.8)	7	(2.1)	6	(1.3)	6	(1.8)	5	(1.4)

The teacher has consistently been identified as the most preferred source of information for all the variables. On information on puberty, the teacher recorded 78.3% among males and 61.6% among females. On information on reproduction, it was 70.8% and 62.1% for males and females respectively. Of all the sources, other sources and other relatives were the least preferred, with scores of less than 3% for both males and females. Surprisingly, both males and females seem to be on the same wave length on their most preferred source of information across all variables.

In the FGD, adolescents' mentioned that, they want to hear more of this information, from their teacher. One respondent said;

"Yes, I want to hear more of this from him because once he is my teacher, I expect him to teach me everything; I can ask him a lot of questions and he will answer everything." (18 year old male)

The reason why adolescents prefer teachers might be because, it is usually the teacher who talks about these issues with them and so they get to hear more of it from him thereby making him the familiar source. It could also be that, because teachers have the responsibility to teach these issues, they present the information in a livelier, interactive way, giving their students the opportunity to participate in the discussion and share their views and concerns.

The least preference for other relatives and even parents is most likely to be because, information on sexual and reproductive health from parents and the other relatives may sometimes be filtered, or may even be untrue. This is usually so because, sex and its related issues are a bit difficult to talk about in our Ghanaian society. Adults feel shy to talk about sexuality related issues especially to the younger ones. Even the names of private parts are replaced with other coined words. One of the study participants mentioned that;

"With your mother, when you ask her these things, she won't even mind you and she may even feel shy to say it and you the child may also be shy of your mother." (19 year old female) When they were asked why they do not want to discuss these issues with their parents.

4.2.3.1 Reasons for preferred source of information on sex from friends.

Particularly with regards to sex, adolescents preferred to discuss or get more information from friends. This is probably so because, they mostly share personal issues, similar opinions and interests, and so they do not feel shy talking about sex with each other. As one of them said;

"Because you and your friends can converse freely, it is easier to discuss these issues together with them." (18 year old female)

This triggered the curiosity to ask why they discuss sex in the first place and more so why with their friends especially. These are some of reasons they gave.

"We discuss sex and especially with our friends because, as youth, we must know about sex and about how to have sexual intercourse, with ehh.... ladies." (17 year old male)

"Because there are so many diseases in the country, that is why we discuss sex and whether our friends use condom during sex or not so that they can protect themselves." (18 year old female)

"Because some of our friends might get pregnant or catch a disease so we need to discuss it and help our friends." (16 year old female)

It is indeed interesting and refreshing to know that adolescents care so much about each other and want to do everything possible to support each other. Also, adolescents sometimes want to know the perception and experience of their friends regarding sex and what they can also do to enjoy sex. So these are some of the things they usually find out from friends.

"We normally ask our friends about ejaculation and the feelings you get when you have sex." (19 year old male)

"We ask about the styles our friends use and whether the styles are nice or not." (17 year old male)

"Sometimes I ask my friends whether they feel pain when they have sex." (17 year old female)

Males felt more comfortable to share these views compared to females. This could be because females either felt shy or just did not want to appear to be "spoilt girls". This can be traced from the way females in particular are socialised to behave towards sexuality issues. The masculinity and ego of males are usually displayed under these kinds of circumstances.

4.4 The sexual behaviours of adolescents and the reasons for it among adolescents in Kintampo.

4.4.1 Sexual behaviours of adolescents.

The table below represents the sexual behaviours of adolescents interviewed.

Table 4: Relationship status and sexual activity among adolescent male and females

Ever been in a relationship	n	% Males n=342	n	% Females n=451	n	% All N=793
Yes	84	(24.6)	250	(55.4)	334	(42.1)
No	258	(75.4)	201	(44.6)	559	(57.9)
Ever had sex						
Yes	19	(22.5)	131	(52.4)	132	(39.4)
No	65	(77.5)	119	(47.6)	202	(60.6)
Ever had sex those in relationship		n=84		n=250		n=334
Yes	76	90.4	235	(94.0)	311	(93.1)
No	8	9.6	15	(6.0)	23	(6.9)

Out of the 793 adolescents who were interviewed, 42.1% had been in a relationship. 55.4% of the females and 24.6% of the males interviewed have had a boy or a girlfriend to whom they were emotionally and sexually attracted and whom they had a relationship with, in the past one year. Among the adolescents who had been in a relationship, 93.1% had had sex. The third question was only administered to respondents who had been in a relationship and that is why the sample size differs.

There is a huge difference between the percentage of male and female adolescents in a relationship (24.6% and 55.4%) respectively. The situation is also reflected in the percentage of the male adolescents who have had sex and their female counterparts (22.5% and 52.4%). Surprisingly, among only those in a relationship, almost all have had sex. And the percentage this time is almost equal for both sexes (90.4% and 94.05%)

The fact that the percentage of females (55.4%) had been in a relationship among the females interviewed is higher than the percentage of males (24.6%) who had been in relationship among the males interviewed is not very surprising because females at this stage tend to develop faster than their male counterparts and so appear more developed and attractive to

older males whom they mostly get date. Also, females tend to marry earlier than males in adult life and this scenario seem to be a shadow of that. It could also mean that with females, once they have sex with someone, they easily refer to it as a love relationship. But with males though they may have sex with a female, they usually would not refer to it as a love relationship but a sex partner once they are not emotionally attached to the person.

The high existence of sexual intercourse among adolescents in a relationship is probably because the concept of sexual intercourse is not detached from a relationship as reflected in some of the responses they gave when asked in the FGD what their expectations were, once they got into a relationship.

"When you are in a relationship, you must make sex. Because you are partners you can have sex any time." (19 year old boy)

"You have to show love to the boy in other for him to love you too, through sex." (17 year old female)

"You have to do everything together; like eating together, walking together and sleeping together." (18 year old male)

Adolescents seem to perceive sex as an integral part of the relationship and so it appears that the concept of relationship has been equated to marriage

Some of those who have been in a relationship have also engaged in concurrent relationships 8.3%; thus, being in a relationship with more than one partner at the same time. 6% of females and 15% of males agreed to this. The reason for concurrency might be due to one of the common sayings in Ghana that, "variety is the spice of life" Also, most people do that to make up for what they need but do not get from their regular partners. The fact that the percentage of males in concurrent relationship is higher than that of the females could be blamed on the "double standards" in the society where males are allowed to have more partners, but females are not.

Of all those who have had sex, 6.2% said they were forced to either by their partner, a friend or a relative. Another 2.5% have engaged in one night stand before, and 0.9% have ever exchanged sex for money. Also 0.2% have experienced an attraction towards someone of the same sex. This low response particularly on homosexuality is possibly because the practice is condemned by religious authorities and so even if people are attracted towards same sex, it is not common for them to readily identify with.

4.4.2 Knowledge on pregnancy and sexual activity among adolescents.

One of the reasons why most adolescents do not want to have sex is unwanted pregnancy. To prevent unwanted pregnancy, one needs to know about the possibilities of getting pregnant in the first place. It was therefore important to know whether knowledge on the possibility of getting pregnant is associated with sexual activity among adolescents. Table 5 shows this.

Table 5: Association between knowledge on pregnancy and sexual intercourse among adolescents who have had sex and those who have not.

Sexually Active N=789	True		False		Don't know		False	
	n	%	n	%	n	%	n	%
	A woman can get pregnant the very first time she has sexual intercourse							
No	272	(56.9)	111	(23.3)	95	(19.9)	478	(100)
Yes	227	(73.0)	55	(17.7)	29	(9.3)	311	(100)
Total	499	(63.2)	166	(25.2)	124	(15.7)	789	(100)
								P-value =0.000
	A girl is most likely to get pregnant if she has sex while in her period							
No	286	(59.8)	95	(19.9)	97	(20.3)	478	(100)
Yes	165	(53.0)	120	(38.6)	26	(8.4)	311	(100)
Total	451	(57.2)	215	(27.2)	123	(15.6)	789	(100)
								p-value=0.000
	A girl cannot get pregnant if she thoroughly washes herself after sex							
No	76	(15.9)	259	(53.2)	143	(30.0)	478	(100)
Yes	49	(15.8)	214	(68.8)	48	(15.4)	311	(100)
Total	125	(15.8)	473	(59.9)	191	(24.2)	789	(100)
								p-value =0.000
	A girl cannot get pregnant when she has sex in a standing position							
No	112	(23.3)	223	(46.7)	143	(30.0)	478	(100)
Yes	63	(20.3)	189	(60.8)	59	(18.9)	311	(100)
Total	175	(22.2)	412	(52.2)	202	(25.6)	789	(100)
								P- value= 0.000

*(data for 4 people missing and have been excluded from the analysis that is why N=789)

From the above table, knowledge on the fact that a woman can get pregnant the very first time she has sex is higher (73%) among the sexually experienced compared to those who have not had sex (56.9%). Also adolescents who are sexually experienced (38.6%) are twice as much to know that a girl cannot get pregnant if she has sex while in her period compared to those who have not had sex (19.9%). Knowledge on all the above pregnancy related variables are higher among the sexually experienced than the inexperienced. Therefore, sexual intercourse among adolescents is highly associated with knowledge on pregnancy and when it can occur ($p<0.05$).

The possible reason for higher knowledge among the group with sexual experience could be the following. Firstly, because they know some of the circumstances under which they are unlikely to get pregnant, it gives them the option to freely have sex especially in their safe periods, and not be worried about unwanted pregnancy. Secondly, once they have this

knowledge, they can protect themselves and have sex or avoid sex when they think it is unsafe. The opposite can also be true. Thus, because adolescents who have not had sex do not have this knowledge, they would want to avoid sex all together in order not to avail themselves to unwanted pregnancy.

On the other hand, it could also mean that because this group of adolescents are sexually active, they are worried about pregnancy and hence tend to find out more about pregnancy related issues, so that they can avoid it hence, their high knowledge. With the other group, because they are not sexually active, they are not worried about pregnancy hence; do not necessarily care about finding more information about it.

4.4.3 Gender norms and sexual intercourse among adolescents.

There are different gender norms and expectations with which adolescents of both sexes identify. A few of these gender norms were explored to see whether they are associated with the sexual behaviour of the adolescents.

Table 6: Association between Gender norms and expectations and sexual behaviour of adolescents.

Sexually Active N=789	Agree		Disagree		Total	
	n	%	n	%	n	%
	A boy and a girl can have sex to see if they suit each other before marriage					
No	236	(49.4)	242	(50.6)	478	(100)
Yes	186	(59.9)	125	(40.1)	311	(100)
Total	422	(53.5)	367	(46.5)	789	(100)
						P-Value =0.004
	I believe that if a girl loves a guy, she will allow him to have sex with her					
No	276	(58.2)	211	(44.1)	478	(100)
Yes	238	(76.5)	73	(23.5)	311	(100)
Total	505	(64.0)	284	(36.0)	789	(100)
						P-Value=0.000
	I believe that girls should remain virgins till marriage					
No	458	(95.8)	20	(4.2)	478	(100)
Yes	247	(79.4)	64	(20.6)	311	(100)
Total	705	(89.4)	84	(10.6)	789	(100)
						P-Value=0.000
	I believe that boys should remain virgins before they get married					
No	450	(94.1)	28	(5.9)	478	(100)
Yes	227	(73.0)	84	(27.0)	311	(100)
Total	677	(85.8)	112	(14.2)	789	(100)
					P-Value=0.000	

*(data missing for 4 respondents and have been excluded from analysis that is why N=789)

Majority of adolescents (59.9%) who have had sex believe that a boy and a girl can have sex to see if they are suited for each other compared to (49.4%) of those who have not had sex. 95.8% of those who have not

had sex believe that girls should remain virgins until marriage compared to 79.4% of those who have had sex. There is indeed a very strong association between these gender norms and expectations and the sexual behaviour of adolescents *(P<0.005).*

The reason for this could be that, adolescent's beliefs and perceptions influence what they do and so they are just practicing what they believe. Or that because adolescents practice these behaviours, they believe in them Adolescents were asked the reasons why they have sex in the FGD.

4.4.4 Reasons for sexual intercourse among adolescents.

Adolescents are motivated by very different but interesting reasons to have sex. Whiles some do it to satisfy their natural urge and curiosity, others do it for financial support, and so on and so forth. Below are some of the reasons they gave.

"It comes by nature, so we can't control it. Whenever our feelings come, we have to have sex with the ladies." (17 year old male)

"Because of money. To get financial support from the man so that they can use the money to buy food and other things that they need because the parents cannot provide for her." (18 year old male)

"Some people also want to test and see what sex is like so they do it out of curiosity." (17 year old female)

"Sex makes you feel like a woman and sometimes too it makes the girls grow faster." (16 year old female)

4.4.5 Adolescents are influenced to have sex.

Adolescents were also asked whether they are influenced in any way to have sex because, that would also be another reason why they would have sex. While some of them said they undergo some form of influence to have sex, others said they are rather encouraged not to have sex. For those who are influenced, the pressure stems from different roots. It could be due to personal or environmental factors. These are some of the issues they shared.

"It is encouraged. Example, in school when you are having a girl friend, it encourages you to learn because, if you don't learn, and you become last in exams, you will feel shy." (17 year old male)

"Its encouraged because we take friends, sometimes we share ideas on sex so it helps us to be able to participate in the conversation and learn from each other." (18 year old male)

"We must say that some ladies are jealous. So, when they see that their friends are wearing some dresses, they admire the beauty of the dress of

their friends. They may ask; Akosua, who bought this dress for you? If the response is that my boyfriend, it encourages them to also go in for boyfriends." (19 year old female)

4.4.6 Adolescents are discouraged from having sex.

For the adolescents who said they are discouraged from having sex, the reasons they gave mostly revolved around the disapproval from their parents and the family and also the consequences of unsafe sex , such as;

"Sex is discouraged simply because at the age of 15, to 18years or 19 years, if you are having a boy friend, and then you don't know how to protect yourself for it and you have pregnancy, and it will lead to abortion, and abortion lead to death so it will cause harm to you." (a 19 year old female)

"It is discouraged because they do not want it to generate into any problems between families in case there is a pregnancy and the boy is not ready to accept it and issues like that." (a 17 year old female)

"For me, my father does not encourage it. He says I am a child and that; I can rather get married when I get a bit older. He doesn't encourage it, but I have one." (17 year male)

Though discouraged from having sex, some still do. This might therefore mean that some adolescents act according to their own convictions and not what their parents or the social system prescribes. It could also mean that the source of the influence to have sex is more powerful than the ones against sex.

4.5 Knowledge and use of contraceptives among adolescents.

4.5.1 Knowledge of contraceptives among adolescents.

This question was administered to all the participants to verify their knowledge on the various contraceptive methods.

Table: 7 Knowledge of contraceptive methods among adolescents

METHODS &DEVICES		SPONTANEOUS		PROMPTED		DON'T KNOW
N=793	n	%	n	%	n	%
Condoms	**681**	(85.9)	94	(11.9)	18	(2.3)
Pills	**250**	(31.5)	271	(34.2)	272	(34.3)
Injection	**203**	(25.6)	400	(50.4)	190	(24.0)
Periodic	**120**	(15.1)	265	(33.4)	408	(51.5)

Abstinence						
Emergency Con Pill	**45**	(5.7)	100	(12.6)	648	(81.7)
Withdrawal	**27**	(3.4)	198	(25.0)	568	(71.6)
Implants	**8**	(1.0)	93	(11.7)	692	(87.3)
Jelly/Foam	**7**	(0.9)	67	(8.5)	719	(90.7)
IUD	**6**	(0.8)	33	(4.2)	754	(95.1)
Male Sterilization	**4**	(0.5)	106	(13.4)	683	(86.4)
OTHER (Complete Abstinence)	**2**	(0.2)	1	(1.6)	778	(98.2)

A greater number 85.9% of all the respondents spontaneously knew of condoms. The second most common method mentioned was the pill (25.6). Aside these two, spontaneous knowledge on all the other methods was not encouraging. As shown in the table below, withdrawal, implants, jelly/foam, IUD, male sterilization, and complete abstinence recorded as low as less than 5% each. The rest recorded less than 40% each.

It is not surprising that the majority of adolescents spontaneously knew about condoms. Due to the HIV epidemic all programs geared towards HIV prevention revolved around consistent condom use, if one could not abstain from sex or could not be faithful to their partners. And so advertisements for condom use were all over on all media platforms. Making it one of the daily vocabularies one would hear. Another reason for this could also be that condoms are the most appropriate methods for unmarried adolescents. Its dual protection capacity makes it more suitable for them and so it is mostly recommended to them.

4.5.2 Contraceptive use among adolescents

4.5.2.1 Contraceptive use at first sex.

Adolescents who have had sex were asked whether they tried to prevent pregnancy at their first sex. Their responses are as seen in table 6 below.

Table 8: Respondents tried to prevent pregnancy at first sex

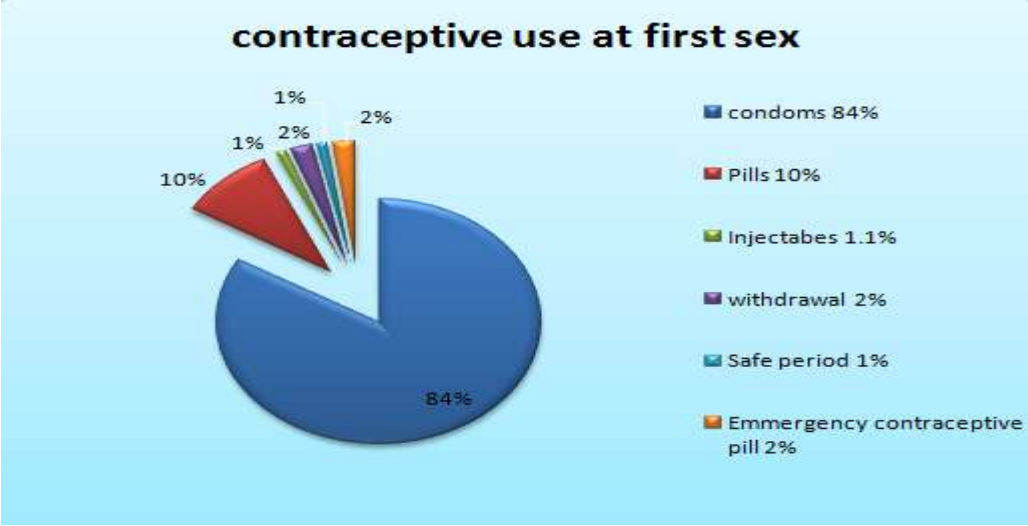
Variable	**all (n=311)**	
Respondent prevented pregnancy at first sex	n	%
Yes	172	(55.3)
No	139	(44.6)

A little over half 55.3% of the respondents said that, during their first sexual intercourse, they tried to prevent pregnancy.

Thinking of the reasons why some adolescents did not prevent

pregnancy at first sex, it could be that they knew they were in their safe period. May be, they did not have any of the instant protective methods available. Also because sex at that particular time might have been unplanned and because sexual intercourse is not part of their regular life, the females do not use any of the other hormonal methods.
It could even be that they neither had the knowledge about contraception or how to use it. Or even still, the skill to use contraceptives or even the self efficacy to negotiate for its use might not have been available. This latter reason could be particularly important for the females because if they are not on any method, then they would need to be able to convince their partners to use a condom, or to withdraw, during ejaculation if they do not intend to get pregnant.
The methods they used included condoms, pills injectables, etc. as illustrated by figure 3 below.

Figure 3: Methods of contraception used at first sex.

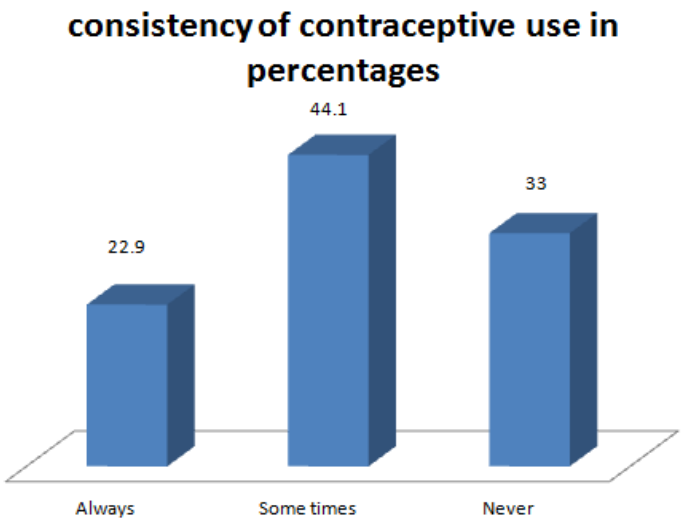


Condoms were mostly used probably because that is what most adolescents know, it has a dual protection function, it is available and accessible, cheaper, and convenient to carry even in wallets.

4.5.2.1 Consistent contraceptive use among adolescents who have experienced sex.

Asked how often respondents used contraceptives among the sexually active (n=311), 32.70% said they have never used any form of contraception. 44.1% said they sometimes use it and only 22.9% said they used a contraceptive method, every time they had sex. This is seen in figure 4.

Figure 4: Consistency of contraceptive use among adolescents who have had sex



The reasons stated above for contraceptive use at first sex might hold true for why adolescent will always use a contraceptive , use it sometimes or never use it. In addition, concerns about getting an STI from the partner might be another motivating factor to either use a contraceptive method always sometimes or never.

4.5.3 Factors that influence contraceptive use among adolescents

So many reasons would influence whether or not adolescents would use contraceptives consistently. The association between some of these factors thus; age, sex, level of education and risk perception and contraceptive use among adolescents who have had sex were explored and they are as follows.

Table 9: Association between age and consistent contraceptive use among adolescents who have had sex.

Age of respondents	How often adolescents use contraceptives							
	Always		Sometimes		Never		Totals	
	n	%	n	%	n	%	n	%
15	5	20.8	8	33.3	11	45.8	24	100
16	14	28.6	15	30.61	20	40.8	49	100
17	13	21.7	31	51.7	16	26.7	60	100
18	16	16.7	47	49	33	34.4	96	100
19	24	28.6	38	45	22	26.2	84	100
Total	72	23	139	44.4	102	32.6	313	100

P- value=0.170

The percentage of consistent contraceptive among the 16 year olds and the 19 year olds is the same at 28.6% each. Surprisingly, there is no association between age and consistent contraceptive use (p-value>0.05) Ordinary, one would expect that with an increase in age, the tendency to

make more appropriate decisions and choices increases, but it is not so in this situation. This therefore means that, contraceptive use among adolescents during sex is probably influenced by other factors rather than their age.

Table 10: Association between level of education and consistent contraceptive use among adolescents who have had sex.

Educational level of respondents	How often adolescents use contraceptives							
	Always		Sometimes		Never		Totals	
	n	%	n	%	n	%	n	%
None	0	0.00	3	42.9	4	57.1	7	100
Primary	5	10.2	14	28.6	30	61.2	49	100
JHS	50	26.7	86	46	51	27.3	187	100
SHS	17	24.6	36	52.2	16	23.2	69	100
T/training	0	0.00	0	0.00	1	100	1	100
Total	72	23	139	44.4	102	32.6	313	100

P-value=0.000

The percentage of consistent contraceptive use increases with an increase increased level of education, from 10.2% at primary to 24.6% at the senior high school level. Level of education is highly associated with contraceptive use ($p>0.05$). This is probably because the more learned people are, the greater their ability to analyse the pros and cons of a given behavior and hence make better choices.

It could also be that, the more one climbs the educational ladder, the more opportunity there is to learn about contraceptives from school and other related sources and hence the possibility to use them. That notwithstanding it is also worth knowing that the numbers enrolled for none and the teacher's training college are so small and do not really make any significant contribution.

Table 11: Association between concerns about getting an STI from a partner and contraceptive use among adolescents who have had sex

Concerns About getting an STI (n=311)	How often adolescents use contraceptives							
	Always		Sometimes		Never		Totals	
	n	%	n	%	n	%	n	%
very concerned	33	39.8	33	39.8	17	20.4	83	100
somewhat concerned	11	17.2	37	57.8	16	25.0	64	100
Not conc.	28	17.0	68	41.2	69	41.8	165	100
Total	72	23.1	138	44.2	102	32.7	312	100

P – Value= 0.000

Among adolescents who have had sex (311), 39.8% of those who are very concerned about getting and STI from their partner always protect themselves. Another 39.8% who are very concerned use a contraceptive method sometimes. However, 20.4% who are very concerned about catching and STI from their partner do not use any contraceptive method. There is a very significant association between concerns about getting an STI from a partner and contraceptive use *($p<0.05$).*

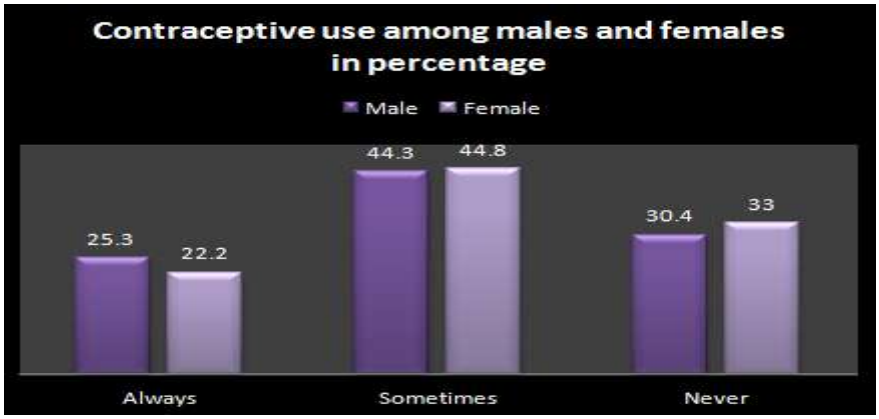
When people are worried about something, they are likely to take a positive action against it and so it is understandable when adolescents who are very concerned about getting STIs from their partners protect themselves. However, it is surprising that though some adolescents say they are concerned about getting STIs from their partner, they do not protect themselves.

The probable reasons for not protecting themselves though concerned about getting an STI from their partner could be that in the first place they are ignorant of the fact that they can protect themselves. Secondly they might not know how or which method they can use to protect themselves. Thirdly, though they may know all the above yet, they do not have the self efficacy or skill to negotiate for condom use.

4.5.4 Association between respondent's sex and consistent contraceptive use among adolescents who have had sex.

Contraceptive use among males and females who have had sex (311) is almost equal for both sexes in all instances. Thus; always (25.3% and 22.2%), sometimes (44.3% and 44.8%) and never (30.4% and 33%) respectively. This is expected because in a perfectly representative sample, the percentages could even be the same. The reason for this association might be because adolescents from both sexes are in a relationship with each other hence, report of contraceptive use amongst them should under normal circumstances be the same. There is however no association between being a male or a female and contraceptive use *($P>0.05$).* The percentage of contraceptive use among males and females is represented in figure 5 below.

Figure 5: Consistent contraceptive use among males and females who have had sex.



4.5.5 Pregnancy among adolescents

Table 5 gives an over view of the number of sexually active adolescents who have ever been pregnant and the state of pregnancy at the time of the survey

Table 12: Pregnancy among adolescents

Ever been pregnant	**n**	**% all N=311**
Yes	94	30.2
No	217	69.8
State of pregnancy	**n=94**	**%**
Currently pregnant	18	19.2
Baby alive	40	42.6
Aborted the pregnancy	32	34
Miscarriage	3	3.2
Baby born alive but died later	1	1.1

About one third (30.2%) of those who have experienced sex have been pregnant before. At the time of the interviews, approximately 19% were still pregnant. Almost 43% had already given birth and their children were still alive. 34% of them had also aborted their pregnancy. The reason for this high rate of pregnancy among adolescents is obviously due to non contraceptive use amongst them, determinants of which is numerous. Only 0.8% of adolescents interviewed said they were married. So if even they are part of the number who have been pregnant, they signify only a negligible proportion. There is a high possibility that, the adolescents who have given birth and those still pregnant will not go back to school. This has the tendency to impact negatively on their well being and the wellbeing of their children economically, physically, socially and emotionally.

4.6 Critical review of the survey conducted

The criteria used for this review is from the book; Designing and conducting health systems research projects volume 1 (Varkevisser et al., 2003)

Relevance: The survey was relevant because adolescent reproductive health plays a critical role in their overall well being. It was evident that some adolescents have unsafe sex. They contribute 3% of all births in Kintampo majority of which are unwanted pregnancies (KHDSS 2009). Some adolescents had to write their final exam while pregnant. I have witnessed series of uncompleted abortions that mostly would have taken the girls life had she not been rushed to the hospital. Also, STIs/HIV are common causes of morbidity and mortality in Kintampo of which adolescents also suffer. And so the study was relevant to adolescents, to the health workers, to researchers and the community as a whole.

Avoidance of duplication: The survey was the first of its kind to be conducted in the study area.

Urgency of data needed: It was important to conduct the survey at that time because there is no such data available and so if anybody wanted to intervene in any way, it was not going to be evidence based and may not have been the most appropriate intervention needed.

Political acceptability: The survey was politically acceptable because the government is committed to adolescent reproductive health.

Feasibility: Money, human resource, logistics and all necessary support was available.

Ethical acceptability: Though some of the questions were a bit sensitive, participants accepted to be part of the study after consenting. Results of the study will be shared with the general public on the radio as one of KHRC's mode of information dissemination.

Sample representativeness

The sample for the survey was not representative for age and educational status as was shown under the description of basic characteristics (chapter 16). The number of adolescents for all the age groups should have been representative of how many of them are in the population. Representativeness in the various categories of the level of educational attainment i.e. (none- high school) should also have been catered for. Because all this was not done, there is a serious bias in the results of the survey. Therefore generalisation of the survey results is not possible

The conduct of the survey: Research design (cross sectional survey) was appropriate given the objective of the survey. A set of questions from an instrument developed for the WHO was used for data collection. After ethical clearance, the questionnaire should have been translated into the

local language, by at least two people, and back translated into English by another person to see which one was the most nearest in meaning to the original questionnaire. If none of the two was better, then a third person should have been asked to another translation. All these unfortunately were not done. Field workers interpreted the questions in the local language "Twi" to the respondents. Though field workers had been trained, it had the tendency to create both an interviewer and respondent bias. Depending on the way the questions were framed would determine the responses to those questions.

The questionnaire from the WHO was very detailed and also a very bulky instrument and not possible to administer in a single interview. Most of the questions were also based on the European and American context and hence, called for the need to adapt the selected questions to suit the local context. Though codes for ranking of responses were provided, they were difficult to understand and interpret.

Though all objectives of the survey were achieved, some were not very "SMART". The proposal was not written based on any conceptual framework.

Also there was no specific knowledge indicator for measurement. This was very important to have been done since knowledge cannot be measured by a mere hearing about or learning about something.

The result of the study showed that some adolescents had given birth and others were still pregnant. A question on how they felt about the pregnancy and whether they liked it at the time it occurred should have been asked. It was also important to have asked whether the ones who had babies went back to school or whether those who are still pregnant will go back to school after delivery.

More so, it would have been interesting to compare the results of adolescents who have never been to school to those who have but it was not possible here because respondents were mostly conveniently sampled and those who have never been to school were not truly represented. Another important thing would have been to stratify results by urban and rural dwellers to see the difference.

Teachers were the preferred source of information. However it is important to mention that, adolescents were given options to choose from. Maybe, it would have been different if they were given the flexibility to make their own choices. Also probably because almost all respondents have been to school, the teacher was the obvious choice.

Lastly, there were no detailed questions on adolescent's perceptions on homosexuality and other sexual behaviours. These perceptions would have been good to know.

Chapter: 5 Discussions, conclusions and recommendations.

5.1 Discussion.

The discussion is done in line with thesis objectives, literature review and the conceptual frame work.

5.1.1 Knowledge on Sexual and Reproductive Health, sources of information and preferred sources of information.

In Ghana sex before marriage is frowned upon. The religious beliefs and socialization system in Ghana has made it difficult for young people, to discuss sex related issues especially with adults since sex is seen as a preserve of only married adults (Awusabo-asare & A. Biddlecom 2006; Okereke, 2010). It is perceived by most adults that when adolescents receive education on sexual and reproductive health issues the tendency to have sex is heightened (Awusabo-asare et al., 2008). But there is there is no scientific evidence for this opinion

Knowledge on pregnancy related issues particularly were not encouraging. Compared to 59% males and 66.2% females in this survey, Awusabo et al. (2006) found similar figures from the result of their study which showed that only 53% and 60% of males and females respectively knew that a girl can get pregnant the very first time she has sex. They also found that 56% of adolescents did not know that a female can get pregnant if even she washes herself thoroughly after sex (Awusabo-asare & A. Biddlecom 2006), compared to 60% of participants from this survey. Rondini and Krugu (2009) also found that, though adolescents have an idea of something called "safe period" in a woman's life, they did not know exactly what that meant (Rondini & Krugu 2009).

Knowledge is a very important factor in decision making. It gives the bearer much room to examine the pros and cons of a given option. And hence places the individual in a better position to make informed choices.

5.1.2 Sexual behaviour of adolescents and reasons for it.

Of all the adolescents interviewed who agreed that they were in a relationship, almost all of them have had sex (95.2%). But among all the adolescents, only 24.6% of the males and 55.4% of the females have had sex. This seems to have become the order of the day, everywhere else. Agyei (2000) et al, also found that 67% of males and 78% of females, among the adolescents they interviewed in their study had had sex (Agyei et al., 2000). Another study among four African countries indicated that 37% females and 60% males among adolescents interviewed from Malawi had had sex. 48% females and 49% males from Uganda had also had sex (Bankole et al. 2007). The difference in high percentage between the result of this survey and what Agyei et al (2000) found is probable because it included a representative sample of both adolescents who have

been to school and those who have never. The sample for the survey did not sufficiently cater for that. Also with the study from the other African countries, the population was much younger (12-19).

In most instances, the percentage of females who have had sex is usually greater than males. Glover et al (2003) also found in their study that among those who have had sex; females had 1.6 times the odds to have sex, compared to males (Glover et al., 2003) This may be attributed to the fact that girls usually get into relationships much earlier and have older boyfriends and some of them are also raped. Though some boys are also raped, it is females who are usually the victims especially at this stage. It then means that, more young females than males are vulnerable to all the negative consequences of unsafe sex.

5.1.2.1 Adolescent's perceptions and sexual activity.

Adolescents' perceptions about sex and when it should occur can influence their sexual behaviour. They perceive that a relationship cannot be termed so if it is devoid of sex. Adolescents who choose not to have sex are seen as timid, primitive and out of fashion (Okereke 2010; Nyovani et al., 2007, Seme & Wirtu 2008).

5.1.2.2 Gender norms and perception.

In the survey, the gender norms perceived by adolescents were highly associated with their sexual practices. But in some instances, adolescents also practice something contrary to their beliefs. 79.4% of adolescents who believed that girls should remain virgins till they get married have had sex. This is similar to what Awusabo et al. (2006) found when 87% and 84% of females and males respectively who have experienced sex agreed that young women should not have sex until they get married (Awusabo-asare & A. Biddlecom 2006). It will therefore be interesting to find out what the motivation for having sex among this group of adolescents was. It is interesting to note that the opinion "no sex before marriage", is hardly practical

5.1.2.3 Parental influence.

Some parents discourage their children from entering into a relationship. Some other parents influence the children to get partners because when they get any financial assistance from the man, they give a part of it to their parents. Nyovani et al, (2007) discovered that, adolescents from poorer homes have 2.7 times the odds of having sex compared to others (Nyovani et al, 2007). A few of the respondent in this survey mentioned ever exchanging sex for money and gifts. Also in the FGDs, interviewees stated one of their reasons for having sex as gaining financial assistance from their partners. Because their parents cannot afford everything they need, they get into sexual relationships for assistance. Tweedie and Witte (2000) also found this to be true in the National survey among

adolescents when 5% of males and 12% of females gave in to sex, because of the financial assistance from their partner (Tweedie & Witte, 2000). This is an unfortunate situation. This situation signifies then that, those adolescents were not really willing for these relationships or sexual acts. Therefore, they are less likely to be able to negotiate for safe sex practices.

5.1.2.4 Peer pressure

Some adolescents reiterated in the FGDs that they receive pressure from their peers to have sex. Even if these peers do not say it by word of mouth, because adolescents would want to also have what their friends have but cannot afford by themselves, they will also find boyfriends to provide these needs. Also, to be able to contribute to discussions held among friends regarding sex and relationships, adolescents would find themselves partners and also have sex. This means that peers are very influential.

5.1.2.5 The school.

It continues to educate adolescents on reproductive health, with the inclusion of sex education in the social studies curriculum of the primary till senior high school syllabus (Awusabo-asare & A. Biddlecom 2006). Adolescents have accordingly not only acknowledged the school teacher as the source of most information of sexual and reproductive health, but also the most preferred source of information. Awusabo and Biddlecom (2006) also found similar response to this question. But they also found that some teachers are responsible for forced sex with adolescents (Awusabo-Asare & Biddlecom, 2006).

5.1.3 Contraceptive knowledge and use among adolescents.

The most common source of information on contraceptives in Ghana has been either the TV or Radio (Awusabo-asare & Abane 2004). Knowledge on contraceptive methods apart from the condom is unacceptably poor. But this is understandable given the reasons discussed in the analysis of the survey results.

Compared to what was found in the national survey of adolescents by Awusabo et al (2006), knowledge on the other contraceptive methods among adolescents is not encouraging in Kintampo though what the national survey found was not any better either. In their study, knowledge on pills was 22% among both males and females, injectables recorded 52% for both sexes. Foam/Jelly scored 11.8% and 15% among males and females respectively. Emergency contraceptive pills also recorded 56.5% and 55.5% for males and female in the same order (Awusabo-Asare et al., 2006). The limited knowledge on contraceptives seems to be a problem with most adolescents nationwide.

Accordingly, only 55.3% of the adolescents who have had sex used a form of contraception during their first sex. Karim et al, (2003) found that, 18% males and 27% female used contraceptives at their first sex (Karim et al. 2003). Implicit in this is the fact that, the rest who did not use any protective method during their first sex stood the chance of either contracting sexually transmitted diseases, including HIV or getting an unwanted pregnancy.

In addition to this, only 25.3% and 22.2% respectively of male and female adolescents used contraceptives consistently. This is not any different from what Karim et al, (2003) found; 20% and 24% among males and females respectively (Karim et al., 2003).

It is amazing to know that, 57.5% of the adolescents think that, it is the female's responsibility to always ensure that, contraception is used Rondini et al (2009) et al found something different when the adolescent males in their studies felt that contraceptive use is the full responsibility of the males. (Rondini & Krugu 2009) This different translation of gender expectations among different adolescent groups in the same country is intriguing.

Some reasons adolescents give for non contraceptive use includes the perception that adolescents feel that they are safe and also the fact that they trust their partners (Biddlecom et al., 2007 ; Rondini & Krugu, 2009).

It is fascinating to note that the majority of adolescents are not concerned about getting an STI/HIV from their partner. This may be attributed to the fact that, they are less aware of the consequences of an untreated STI (Okereke, 2010). And the fact that they are not concerned is associated with their inconsistent contraceptive use. Even for those who said that they were very concerned about getting an STI/HIV from their partner, only 20.5% of them have never protected themselves.

5.3 Conclusions

The key findings from this study indicate a limited knowledge of the most important reproductive health variables. Thus, pregnancy and when it can occur, sexually transmitted infections and contraceptives.

Almost all adolescents in a relationship have had sex. The most worrying part is that, most of the sexual acts were unsafe. While some of them exchange sex for money, others are in concurrent relationships. Only a few adolescents use a contraceptive method consistently. Because of this, approximately 30% of the adolescents who have experienced sex have been pregnant. As much as 34.4% of the pregnancies resulted in abortions. The adolescents who aborted their pregnancies face unpredictable fertility related difficulties and other health challenges in the future, if these were unsafe abortions.

The results from the study serve as a justification for further research into major factors that influence adolescent sexual and reproductive health in Kintampo

5.4 Recommendations.

The recommendations are grouped under research and interventions, those targeting policy makers, and those targeting service providers and Non Governmental Organisations.

5.4.1 Research recommendations.

In my capacity as a research fellow by the time I go back to my country and institution, my maiden recommendation is to myself.

A supplementary research on knowledge, attitude and practices towards sexual and reproductive health among adolescents who have never been to school is needed to tell the full story of the situation of adolescent's sexual and reproductive health in Kintampo

A study of teachers on their knowledge of SHR, their perceptions about teaching it, and their need for further training and material support should be conducted.

These surveys will be conducted using cross sectional study design. Both qualitative and quantitative methods will be used. The mode of sampling will be purposive sampling. These surveys are feasible because reproductive health is now one of the core research areas of the KHRC. And being a core member of the reproductive health team, it is possible to have access to the needed human resource and technical capacity and support.

5.4.2 Policy maker / Pro NGO recommendations

Results of the survey will be shared with the Kintampo District Health Management teams the Education Service and other Non Governmental Organisations at their quarterly meetings. The opportunity will be used to make the following recommendations to them.

The policy on adolescent reproductive health calls for the involvement of adolescents in decision making for them but this is usually not done. The Education Service in Kintampo, the Kintampo District Health Management Teams and the NGOs should seek for the opinion of adolescents by engaging them when they meet to discuss activities and programs on adolescents.

The case where adolescents are expelled from school when they get pregnant should also be reviewed. If the adolescent in question is up to task and willing to be in school till delivery, she should be given the

opportunity to and also allowed to continue from where she left off when she comes back to the school.

Adolescents prefer to talk about sex with their friends. This calls for the need for peer educators. Peer educators should be trained and equipped with the requisite knowledge and skill and from time to time be sent round various schools and churches to meet their fellows to discuss issues of concerns to them and by so doing these peer educators can advise their colleagues on the appropriate behaviour to adopt. Also particularly for the adolescents who are not in school, occasional forums should be organised for them so that they can be given the needed information and education. Radio talks on sexual reproductive health particularly for adolescents should be intensified.

5.4.3 Those targeting service providers

Service providers should provide adolescents with information on SRH, contraceptive methods available, where to get them, the presentation of various method and the side effects. This should be provided, as part of the routine medical information given to all adolescent when they come for any other service at the hospital and not only when they come for Ante natal care. This is because adolescents who are not pregnant and the males do not go for antenatal and hence, do not benefit from the information provided for those who go for antenatal.

Youth friendly service centers should be created. Services should include low barrier STI/HIV and contraceptive services. Particularly, the use of marriage as a criterion for getting access to these services should not be the case. Counselling services should also be provided.

All these recommendations if put in place can impact positively towards improving the sexual and reproductive health of adolescents in Kintampo.

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Annexes

Annex 1 Survey design

A cross sectional design was used for survey. This is because it is a method used to collect data at a specific point in time, to describe people's ideas, attitudes and behaviours on a given issue (Petrei et al., 2009). It was therefore an appropriate design to use given the aim of the survey. However, the weakness of the cross sectional survey, is its inability to analyse causalities. However, the qualitative data collected give at least, some indication of potential causalities.

Management and analysis for quantitative data.

Respondents answered almost all (99.5%) questions. All forms were checked for completeness. They were given unique form and batch numbers coded and double entered into a password –protected database in Microsoft FoxPro.

The exposure variables include knowledge of some sexual and reproductive health variables (reproductive systems, puberty, pregnancy, STIs), sex, level of education, knowledge on contraceptives, gender norms and expectations, and risk perception.

The outcome variables are: sexual activity among male and female adolescents and contraceptive use among male and female adolescents.

Qualitative methods.

In the qualitative part of the study, seven Focus Group Discussions (FGDs) were conducted with the adolescents. Each focus group comprised of 8 to 12 people. Separate discussions were held among the following groups; males from age 15 to 17, females from ages 15-17, males from age 18 to 19, and females from age 18 to 19. Other groups were males and females of ages 15 to 17, males and females from age 18 to 19, males and females ages 15 to 19.

Qualitative data management and analysis.

Focus group discussions were conducted by a moderator, and note taker. Discussions were tape recorded and transcribed verbatim. Responses were put in matrix under given themes. Data was analyzed manually. This was done to complement the quantitative results.

Sample and Sampling procedure.

The survey was conducted within eight communities within the area. Four from the north and the other four from the south recruitments were done using a pre generated listing from the KHDSS database. But the listing was not strictly followed and so selection was mostly convenient.

Ethical issues

Those who agreed were given a copy of a written consent form bearing their signature/thumb print. Parental assent was sought from parents of adolescents who were less than 18 years, before they were consented. The informed consent forms were countersigned by a witness where applicable and a study investigator or a designated person. Completed survey forms were also kept safely under lock and key within the KHRC premises and were accessible only to the named study investigators.

Sample size estimation

The sample size for the study was estimated based on the following assumptions:

- In a nationwide survey among adolescents aged 15 to 19 years, it was discovered that. The prevalence of high risk sexual behaviour among males (15-19) in the Brong-Ahafo region is 90.4%. But the national inter-regional range is 61.90 – 95.90. For this study, the prevalence among males was assumed to be 85% with 95% as the worst acceptable prevalence.
- For females (15-19) years, the regional prevalence is 39.4 but the national inter-regional prevalence is 33.6- 68.6. We assumed the prevalence to be 50% with 65% as the worst acceptable prevalence.
- Statistical power (the probability of rejecting the null hypothesis when it is actually false), is 80%
- Level of significance is 95%
- Using Epi Info® 6.0, the estimated sample size was: males = 318 and females=364
- With an assumed 15% non-response rate due to the sensitive nature of the questions, the total sample size was estimated to be 784 comprising 366 males and 418 females. Some of the field workers ended up interviewing more people therefore sending to total number interviewed to 793.

Annex 2 Discussions of other theoretical frame work

A lot of factors are taken into consideration when analysing adolescent reproductive health issues especially regarding their sexual health. The ability of adolescents to have a safe and healthy sex life depends on several factors that cut across different facets such as demographic, socio cultural, political, environmental, economic, gender related issues, to mention but a few. Many determinants influence contraceptive use among adolescents.

A number of behavioral change models have explored the determinants of behavior change but none has been very exhaustive (Green and Kreuter, 1999:154). Elements from four of such models have been used in this

thesis, in the quest to explore and describe the determinants of contraceptive use among adolescents and are discussed below.

The Health Action Process Approach by Ralf Schwazer (1992) suggests that, for someone to adopt, initiate, and maintain a healthy behavior, the person has to go through a structured process made up of a motivation and a volition phase. The intention formation is referred to as the motivation phase whereas the volition phase involves the planning, and action itself. The role of Perceived self-efficacy at the different stages of a healthy behavioral change is very important in this model.

In the volition phase, we have two different groups of people. Those who intend to undertake a given behavior, and those who really act. So there are the inactive and the active people. For example, we may have adolescents who intend to use a condom, when they have sex, and those who, in addition to that, really use it.

Principle number three is the post intentional planning. This is where the intenders in the volitional preactional stage, even though they are motivated to adopt the new behavior, are unable to, due to possibly, the lack of the requisite skill to be able to do so. Planning is very crucial at this stage because it serves as an operative mediator between intentions and behavior. For instance a young adolescent may want her partner to use a condom but might not have the right negotiating skill to convince him to use it.

The fourth principle emphasizes two kinds of mental simulation. There are two aspects to planning; action and coping planning. The former deals with the when, where, and how of intended action, while the latter involves the expectation of obstructions and the devising of options to help accomplish the set objective even in the face of the present hurdles. So an adolescent may plan when, where and how to engage in safe sex, as part of the action planning, and also the decision to keep a condom in his or her wallet all the time, as a means of coping planning.

Last but not least is the fifth principle, phase-specific self efficacy. Perceived self-efficacy is needed in the whole of the change process, but it is important to note that this differs from phase to phase, given that, different challenges come up, as people advance from one phase to the next one. Preactional self-efficacy, coping self-efficacy, and recovery self-efficacy are different concepts which must be acknowledged as such. The individual must see him or herself as having the potential to control all the situations around him or her (HAPA, Schwarzer, 1992).

A closely related model to this is the health belief model which was first propounded by Rosenstock in 1966, and later modified by Becker and colleagues. The model suggests that, an individual’s belief in a personal threat together with the belief in the effectiveness of a proposed

behaviour will predict the likelihood of the adoption of a proposed behaviour. It emphasizes four constructs which includes firstly, an individual's perceived susceptibility to a condition. For instance, an adolescent's perceived susceptibility to the negative consequences of risky sexual behaviour, the perceived severity of those consequences, the perceived barriers that facilitates or discourages the adoption of a promoted behavior, such as wearing a condom during sex, and the perceived benefits of adopting that behaviour. Other crucial issues termed intermediary factors between these constructs and the proposed behavior include demographic variables like age and sex, socio-psychological variables like internalised cultural norms, perceived self efficacy to adopt the desired behavior, and external influences that will encourage the desired behavior, such as information and the role of powerful others, health motivation, perceived control over the behaviour, and perceived threat of not undertaking the health action recommended(Rosenstock 1966).

Another model is the theory of planned behavior by Ajzen (1991) which states that, personal attitudes, subjective norms and perceived behavioural control, together shape an individual's behavioural intentions and behaviour. This means that, before an individual takes an action, the attitude of the said person towards the action, the approval of the ' important others' in the person's life, and the conditions needed to be able to take that activity come to play, before the action takes place. (Ajzen,1991). So in implication, whether or not adolescents will choose to use a contraceptive method depends on their attitude towards contraceptives, the influence of their "important others", (could be partner) and the necessary conditions knowledge, access, affordability, availability, etc,) of contraceptives, before they are used.

The weakness of these models is that, they do not consider the contextual factors such as social and economic limitations, and environmental and political roles (Gorgen 1997). The health belief model and the theory of planed action do not touch on social norms and pressures from peers but these are very crucial especially in adolescent behavior change. These models are individualistic and depend more on the individual's ability to make informed decisions and choices. All these three models are disease oriented. These limitations called for the need for a fourth model, the Precede/proceed model, by Green and Kreuter, 1999. Theirs is an extension of the Health Belief Model to include structural and environmental dimensions. The model suggests that, health problems are multidimensional and hence deserve multifaceted approach. Therefore the quest to promote a healthy behavior deserves a multi- sectoral approach.

The model hypothesizes that, before a healthy behavioral change can occur, there is the need for a complete analysis of the educational and ecological, administrative, environmental, social, epidemiological, behavioral, situation, and an assessment of the existing policy before an

intervention is initiated. This assessment revolves around the four factors, thus, predisposing factors, reinforcing factors, and enabling factors. The predisposing factors are the motivating factors that influence the adoption of the healthy behavior. The reinforcing factors are the outcomes of the behavior, negative or positive that influences the continual adoption of the behaviour. The enabling factors are those variables in the environment that assists progress of the action. All these are intervention oriented. The administrative and policy appraisals done identifies exiting government policies and resources in addition to favourable institutions and organisations whose presences determines the success of a proposed health program. The last bit mentions the implementation of the program, the processes involved, and the evaluation of the impacts and out comes (Green and Kreuter, 1999). The model is much concerned with what determines a given behavior and based on that, interventions can be instituted.

This model however does not offer enough propositions on how to solve the short comings of the social and environmental factors.

Annex 3 Data collection tools

Quantitative tool

KINTAMPO HEALTH RESEARCH CENTER YOUNG PEOPLE'S SEXUAL AND REPRODUCTIVE HEALTH STUDY SURVEY FORM 30092010 ENG VERSION 01	FORM NO.	BATCH NO.

BASIC INFORMATION.

1.0 Participant's Study ID.....,……	R H	STUDYID
1.1 KHDSS PERM ID.....		PERMID
1.2 Name of community.....		CNAME
1.3 Compound Number.....		COMPNO
1.4 Date of Visit (dd/mm/yy).....		DATEVISIT

1.5 Staff Code……..... FW

SOCIOECONOMIC AND FAMILY CHARACTERISTICS

1.6 Sex of Respondent…….. 1.Male | 2.Female — RESPSEX

1.7 What is your date of birth? (DD/MM/YYYY)
(Enter 15 if dd=NK, 06 if mm=NK, 8888 if yyyy=NK) — DOB

1.8 How old are you?
[confirm with 1.7, estimate age if yyyy is =NK]……..... — AGE

1.9 Have you ever attended school?..... 1.Yes | 2. No — SCHATT

1.9.1 What is the highest level of education reached?

				MEDLEV
1.None	2. Primary School	3. Middle /Continuation school, JSS/JHS		
4. Technical/ commercial/SSS/SHS		5.Post-middle college- teacher training, secretarial	6.Post secondary-Nursing, polytechnic	
7.University		8. Not Known		

1.9.2 What is the number of years completed at the highest educational level reached?
[88 =NK, 99 =NA] — NUMYRS

2.0 Are you currently single, married or living with a man, or are you widowed, divorced or separated?

			MARRIED
1. Married	2. living together	3.Widowed	
4. Divorced	3.Separated	6.Single, unmarried	

2.1 What ethnic group do you belong to?

				ETHNIC
11.Akan	12 Mo	13 Dargaati, Frafra, Kusasi	14. Fulani	
15.Ga, Adangbe, Ewe	16. Gonja, Dagomba, Mamprusi	17.Konkomba, Baasare	18.Bimoba,Chokosi	

19.Sisala, Wala	20.Zabrama	21.Banda/Pantra	22.Other: specify .....

2.2 What is your religion?

1. Catholic	2.Protestant	3.Pentecostal	4. Muslim	5.Traditional African Religion	6.Other: Specify.....	RELIGION

2.3 Who do you live with?

1.Both Parents	2.One Parent	3. Other relatives	4. Guardian	5. Friend	6.Other Specify……..	LVWIT

2.4 Do you find it difficult or easy to talk to him/her about things that are important to you? ***(N/A if participant lives alone)***

1 Very difficult	2.Difficult	3.Average	4.Easy	5.Very easy	6.Do not discuss important things with him/her	7. N/A	TIMPT

2.5 Do you ever discuss sex-related matters with him/her?.....	1.Yes	2.No	3.N/A	DSEX

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

1.Often	2.Occasionally	3.N/A	DISEXF

2.7 Who do you find easy to discussed sex-related matters with? (**circle all that apply)**

1. Mother	2.Father	3.Sister	4.Brother	5.Aunt	WDSEX
6.Cousin	7. Friend	8.No one	9.Other specify……..		

Most Preferred source of information on sex-related maters		MISR1
Second Most Preferred source of information on sex -related matters		MISR2
Third Most Preferred source of information on sex-related matters		MISR3

2.8 Are both of your parents alive?

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

2.9 Are you currently engaged in any work that gives you income?.....	1. Yes	2. No	WORK
3.0 How old were you when started this work?..... (99 if never worked)			WORKAGE

3.1 Are you into any vocation?	1.Yes	2.No	VOC

3.2 What type of vocation is it?

1.Hair dressing	2.Carpentry	3.Dressmaking/Tailoring	4.Massonry	VOCTYPE
5. Auto mechanic.	6. Other specify.....		7.N/A	

Now I have some questions about your social activities.

3.3 Do you ever go to clubs or parties where young people dance?	1.Yes	2.No	GOCLUB
3.4How many times in the last month did you go to the club or parties where people dance? (enter 99 if 3.3 is No)			NCLUB
3.5 Do you ever go to wake keepings?	1.Yes	2.No	WKEPN
3.6How many times in the last month did you attend wake keeping?(enter 99 if 3.5 is No)			NWKPN
3.7Do you ever attend special programmes organised in villages like Yam festivals?	1.Yes	2.No	SPEPRO

3.8How many times in the last month did you attend any special programme?(enter 99 if 3.7 is No)			NSPEPR
3.9Do you ever go to the cinema halls to watch movies?	1.Yes	2.No	GOMVIE
4.0 How many times in the last month did you go to the movies? (enter 99 if 3.9 is No)			MMOVI
4.1Do you drink alcohol?	1.Yes	2.No	ALCOHOL
4.2 How many days in the last two weeks did you drink alcohol? (enter 99 if 4.1 is No)			NALCL
4.3 Do you smoke cigarettes?	1.Yes	2.No	CIGARET
4.4 How many sticks of cigarette did you smoked in the last 7 days? (enter 99 if 4.3 is No)			SCIGARET

KNOWLEDGE OF REPRODUCTIVE HEALTH AND SOURCES OF INFORMATION.

4.5 Have you ever learnt about puberty?.....	1.Yes	2.No	PUBERTY

(FW: Say that; I mean the changes that occur, when growing from childhood to adulthood)

4.6 From whom or where did you learn about Puberty? ***(multiple answers apply)***

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

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

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

4.6.1 Most Preferred source		MPS1
4.6.2 Second most Preferred		MPS2
4.6.3Third most Preferred.		MPS3

4.7 Have you learnt about sexual and reproductive systems of men and women?.....	1.Yes	2.No	REPSYS

(FW: Say that,: I mean, the means by which men and women have sex and make babies)

4.8**F**rom whom or where did you learn about sexual and reproductive systems of men and women? ***(multiple answers apply)***

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

From whom or where would you prefer to receive more of this information from?

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

4.8.1 Most Preferred source		PRS 1
4.8.2 Second most Preferred		PRS2
4.8.3 Third most Preferred		PRS3

LABREL

4.9 Have you learnt about relationships?..... (*FW: Say; I mean boy friend girlfriend, who share some form of intimacy)*	1.Yes	2.No

5.0 From whom or where did you learn about relationships? ***(multiple answers apply)***

1.School teacher	2.Mother	3.Father	4.Sister	5.other family members	6.Friends	FWLR
7. Doctors	8. Books/magazines	9. TV/Videos	10.N/A	11. Other specify.....		

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

1.School teacher	2.Mother	3.Father	4.Sister	5.other family members
6.Friends	8.Radio	9.Books/magazines	10.Films/Videos	11.Other (specify.....

5.0.1Most preferred source		RPS1
5.0.2Second most Preferred source		RPS2
5.0.3Third most Preferred source		RPS3

Please tell me what you think about the following statements.

5.1 A woman can get pregnant on the very first time that she has sexual intercourse	1.True	2. False	3.Don't Know/Not sure	PREG1
5.2 A woman stops growing after she has had sexual intercourse for the first time	1.True	2. False	3.Don't Know/Not sure	PREG2
5.3 A woman is most likely to get pregnant if she has sex while in her period.	1.True	2. False	3.Don't Know/Not sure	PREG3
5.4 A woman cannot get pregnant when she has sex by standing.	1.True	2. False	3.Don't Know/Not sure	PREG4
5.5 A woman cannot get pregnant when she thoroughly wash herself after sexual intercourse	1.True	2. False	3.Don't Know/Not sure	PREG5
5.6 Masturbation can cause serious health problems	1.True	2. False	3.Don't Know/Not sure	MASTPRO

CURRENT/ MOST RECENT HETEROSEXUAL RELATIONSHIP (cross out 5.0 to 7.0 if has never been in a relationship)

5.7 Have you ever had a girl/boy friend? I mean someone to whom you were emotionally and sexually attracted and whom you 'dated'…….	1. Yes	2. No	B/GFRIEND
5.8 How many boy/ girlfriends have you had for the past one year?.....			B/GNUMBR

Ask the following sequence of questions about the (MOST RECENT girl/boy friend.

5.9 How old is/was him/her when you started the relationship? ……			NMAGE

6.0 When you started your relationship what was his/her marital status?

1.Married	2.Living Together	3.Widowed	4.Divorced	5.Seperated	6.Single,unmarried	7.Dont't Know	PMSTS

6.1 What was the occupation of your partner when you started your relationship?		WKSTATUS

6.2Has the relationship ended.....	1. Yes	2. No	RELENDED
6.3 How long did the relationship last?..... ***Calculate in months*** (*enter 99 if still in relationship*)			RELAST

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

1. Me	2. Partner.	3. Both	4. Other (Specify).....	5. N/A	WHONDREL

6.5 Have you ever been in a relationship with two different people at the same time?.....	1. Yes	2.No	DSOMELSE

6.6 How would you describe your relationship with your current partner? (N/A if 6.2 is 2)

1. Casual friendship	2. Serious but with no intentions of marriage	3.Important/might lead to marriage	4.N/K	5.N/A	DESREL.1

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

1. Casual friendship	2.Serious but with no intentions of marriage	3. Important /might lead to marriage	4.N/K	.N/A	DESREL.2

6.8 Did you and NAME have any physical contact, such as holding hands, hugging or kissing?....	1. Yes	2. No		PHYCONT.
6.9 Did you ever kiss NAME on the lips?.....	1.Yes	2. No.		KISSLIPS
7.0 Males: Did you ever put your penis inside NAMES vagina……	1.Yes	2.No	3.N/A	PENINVG1
7.1 Females: Did NAME ever put his penis inside your vagina?.....	1.Yes	2.No	4.N/A	PENINVG2

ONLY FOR THOSE WHO HAVE EXPERIENCED PENETRATIVE SEX
(cross out if participant has not had any penetrative sex.

7.2 Think back to the first time you had sex with NAME- I mean the first time the penis was in the vagina. Would say; READ OUT.

I forced NAME to have intercourse against her/his will	I force	1	SXCIRCUM
I persuaded NAME to have intercourse	I persuaded	2	
NAME forced me to have intercourse	NAME persuaded	3	
Name forced me to have intercourse	NAME forced	4	
We were both equally willing	Both willing	5	

7.2.1 Would you say it was planned or unexpected?.....	1. planned	2. unexpected		PLAN/UNEX
7.2.2 Was this the first time you had full sexual intercourse in your life?.....		1. yes	2.No	FIRSTSEX
7.2.3 How old were you when you first had full sexual intercourse?.....				OLDSEX
7.2.4 Did you regret having intercourse with NAME on that first time?.....		1.Yes	2.No	RGSX
7.2.5 On that first time did you or NAME do anything to avoid pregnancy?.....		1.Yes	2.No	PRPREG

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

1.Condom	2. Pill	3.Injection	4. Withdrawal	5.Safe Period	6.Foam	7.N/A	CONTYP1
7.Jelly	8.Emergency contraception			9. Other Specify.....			

7.3 Did you ever discuss contraception with NAME? IF YES, did you discuss contraception before or after you first had intercourse?

1. Before first intercourse	2.After first intercourse	3.Never	DISCONT

7.4 How often did/do you use a method to avoid pregnancy?	1.Always	2.Sometimes	3.Never	FREQCONT

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

1.My decision	2.NAME'S decision	3.Joint decision	4.N/A	CONTDECI

7.6 What method do/did you and Name mostly use? (***MULTIPE RESPONSES PERMITTED for 7.0-7.1)***

1.Condom	2. Pill	3.Injection	4. Withdrawal	5.Safe Period	6.Foam	CONTYPE2
7.Jelly	8. Emergency contraception		9.N/A	Other Specify.....		

7.7 Where did you or NAME get this method from?

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

7.8 Was there ever pregnancy in any of your relationships.....	1.Yes	2.No	PREGNANT

7.9 What happened to the pregnancy?

1.Currently pregnant	2.Abortion	3.Miscarriage	4.Live birth	5. Still Birth.	5. Live birth but died later	PRGSTUS

8.0 How concerned were you that you might catch AIDS or another sexually transmitted disease from NAME?

1.Very concerned	2.Some what concerned	3.Not concerned	INFECTION

8.1 Did you do anything to reduce the risk of infection?.....	1.Yes	2.No	REDINFECT

8.2 What did you do? *(Probe)……*	1.Used Condom	2. Took Medicine	3.N/A	4.Other (specify) ……	WHATDID

TYPES OF HETEROSEXUAL CONTACT

(If participant has no boy or girl friend, say that, 'you told me that you have had no girl/boy friends. I now want to ask you about any sexual contacts that you may have experienced' and then ask the questions that follow.)

(If participant has a boy or girl friend, say that, 'you told me about your relationship. Apart from him/her and any earlier boy/girlfriends I now want to ask you about other types sexual partners that you may have experienced' and then ask the questions that follow.)

8.3 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	FORCEDSEX
8.4 Some young people have one 'night stands' perhaps after a party or after drinking has this ever happened to you?	1.Yes	2.No	1 NITSTAND
8.5 Did you use any form of contraception in the process?.....	1.Yes	2.No	9.N/A	I NITESTANDC
8.6 Some young people give/receive money or gifts in exchange for Sex. Has this ever happened to you?.....	1.Yes	2.No	GIFTFORSEX
8.7 Did you use any form of contraception in the process?.....	1.Yes	2.No	9.N/A	GIFTFORSEXC
8.8 Some people are usually attracted to the same sex. Have you ever had this experience?	1.Yes	2.No	HOMOSEXUAL
8.9 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	HOMOINTIMACY

THIS PAGE IS FOR ONLY THOSE WHO HAVE NEVER EXPERIENCED SEXUAL INTERCOURSE. (cross out 9.0-9.4 if participant has never had sex).

People have mixed reasons for not having intercourse. I will read some reasons. Please tell me whether it applies to you or not.	Applies	DoesNot Apply	Don't Know	
9.0 I don't feel ready to have sex…….	1	2	3	NOSXRES1
9.1 I have not had the opportunity…….	1	2	3	NOSXRES2
9.2 I think that sex before marriage is wrong……	1	2	3	NOSXRES3
9.3 I am afraid of getting Pregnant/Impregnating someone……	1	2	3	NOSXRES4
9.4 I am afraid of getting HIV or other STIs…….	1	2	3	NOSXRES5

9.5 Do You feel pressure from others to have sexual intercourse? If yes, A great deal or little?	1.Great deal	2. A little	3. None	PRESEX

9.6 From whom do you feel pressured? **Probe and circle all that apply**

1.Friends	2.Family	3.Partner/ Special friend	4.N/A	5.Other: Specify.....	WPRES

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KNOWLEDGE AND EVER USE OF CONTRACEPTIVE METHODS.

9.7 (Now I have some questions about contraception- I mean ways in which men and women can avoid getting pregnant or prevent STIs. Which of TYPES have you heard of?) **(Do not prompt. Circle as many as apply)**

1.Pill	2.Injection	3.Condoms	4.Emergency contraceptive pill	CONTRA
5.Withdrawal	6. Periodic abstinence	7. IUD	8. Implant	
9.Jelly/Foam	10. Male sterilization	11.Other: Specify.....		

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

1.Pill	2.Injection	3.Condoms	4.Emergency contraceptive pill	SUIT
5.Withdrawal	6. Periodic abstinence	7. IUD	8. Implant	
9.Jelly/Foam	10. Male sterilization	11.Other(specify)		

KNOWLEDGE OF HIV/AIDS AND SEXUALLY TRANSMITTED DISEASES

9.9 Have you heard of HIV or AIDS?.....	1.Yes	2.No	HIV/AIDS

10.0 Apart from HIV/AIDS, there are other diseases that men and women can catch by having sexual intercourse. Have you ever heard of any of these diseases? ……..	1.Yes	2.No	STI/STD

10.1 Please mention any two types of STIs/STD s that you have ever heard of.

1…….	STI/STD2
2……	

10.2 What are the signs and symptoms of a sexually transmitted disease in a man? Probe. Circle each mentioned.

1.Discharge from penis	2.Lower abdominal pain	3.Ulcers/Sores in genital area	4. Pain during urination	STISYM
5. Blood in urine	6.Genital itching	7. Swelling in genital area	8.Impotence	

10.3 What are the signs and symptoms of a sexually transmitted disease in a woman? Probe. Circle each mentioned.

1.Discharge from vagina	2.Foul smell of discharge	3. Pain during urination	4.Ulcers/Sores in genital area	STISYW
5.Lower abdominal pain	6.Genital itching	7. Swelling of genital area	8.Loss of Weight	

10.4 If a friend of yours needed treatment for a sexually transmitted disease, where could he/ she obtain it?

1.Chemical sellers/pharmacy shop	2. Health centre/hospital/clinic	3.Traditional Herbalists	OBSTITR
4. Self made concoctions	5. Other (specify).....		

For those who have experienced sexual intercourse. Cross out if N/A.

10.5Have you ever had a sexually transmitted disease?			1.Yes	2.No HADSTD
10.6 Did you seek for treatment?			1.Yes	2.No SEKTRET
10.7From where did you seek for treatment?		1.Chemical seller's shop	2.Health centre/ hospital/Clinic	WHSEKT
3.Traditional Herbalists	4. Self made concoctions	5. Other (specify).....		
10.8 Did your partner(s) also seek for treatment?			1.Yes	2.No PATSEKT
10.9 From where did they seek for treatment?		1.Chemical seller's shop	2.Health centre/ hospital/Clinic	WHPSEKT
3.Traditional Herbalists	4. Self made concoctions	5. Other (specify).....		

SEXUALITY, GENDER AND NORMS

Young people have various views about relationships. I will read you out some views. For each one, please me whether you agree or disagree.

11.0 believe that it is alright for boys and girls to have dates…….	1.Agree	2.Disagree	AGR/DIS1
11.1 I believe that there is nothing wrong with unmarried boys and girls to have intercourse if they love each other……	1.Agree	2.Disagree	AGR/DIS2
11.2 I believes that if a girl loves a guy, she would allow him to have sex with her…..	1.Agree	2.Disagree	AGR/DIS3
11.3 I believe that men need sex more than women……	1.Agree	2.Disagree	AGR/DIS4
11.4 believe that a boy and a girl should have sex before they get married to see if they are suited for each other ……	1.Agree	2.Disagree	AGR/DIS5
11.5 I think that sometimes a boy has to force a girl to have sex with her……	1.Agree	2.Disagree	AGR/DIS6
11.6 I believe that a boy will not respect a girl who agrees to have sex with him……..	1.Agree	2.Disagree	AGR/DIS7
11.7 I believe that girls who have sex before marriage regret it later…….	1.Agree	2.Disagree	AGR/DIS8
11.8 I believe that boys who have sex before marriage regret it later……..	1.Agree	2.Disagree	AGR/DIS9
11.9 I believe that girls should remain virgins before they get married…….	1.Agree	2.Disagree	AGR/DIS10
12.0I believe that boys should remain virgins before they get married…….	1.Agree	2.Disagree	AGR/DIS11
12.1 It is mainly the woman's responsibility to ensure that contraception is used regularly……..	1.Agree	2.Disagree	AGR/DIS12
12.2 I am confident that I can insist on condom use any time I have sex……..	1.Agree	2.Disagree	AGR/DIS13
12.3 In case you mistakenly get pregnant/impregnate someone, you will contemplate abortion	1.Agree	2.Disagree	AGR/DIS14

USE AND PERCEPTION OF HEALTH SERVICES

13.0 Have you ever visited a health facility for any kind of service or information on contraception, pregnancy, abortion or STI?	1.Yes	2.No	VISITHEALSEV

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

1.Contraception	2.STD	3.Pregnancy test	4.Pregnancy termination	REASONDOC
5.Gynaecological exam	6. MCH	7.Other (Specify).....	8.N/A	

13.2 What was the attitude of the attending health worker towards you?

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

Did the doctor or nurse talk to you about	Yes	No.	N/A	
13.3 Contraception?	1	2	9	DOCTALK1 DOCTALK2
13.4 Sexually Transmitted Diseases?	1	2	9	DOCTALK3
13.5 Pregnancy?	1	2	9	
13.6 Did you feel comfortable enough to ask questions?	1	2	9	ASKQUE
13.7 Were the questions answered adequately?	1	2	9	QUEANSERED
13.8Was there enough confidentiality?	1	2	9	CONFIDENTIALITY

END OF SRH FORM. PLEASE CHECK YOUR FORM, AND THANK THE RESPONDENT

7.3.2 Qualitative

A guide for Focus Group Discussion

Females

Sources of information

- How do young people of your age usually find out about relationships, sex and contraception?
- Whom or what do young people rely on for information?
- Do young people of your age talk openly to other people about sex and related issues?
- If yes, what is discussed? If no, why not?
- Whom or what are the most important sources of information to young people? Why?

Sexual behaviours

- At what age do young people start having boyfriends and girl friends?
- Is having boy or girlfriend encouraged / discouraged or influenced in anyway? If yes, why?
- Usually by who?
- What does having a boyfriend or a girl friend involve?
- Why do you think women of your age have sex?
- What do you think they get out of it?
- What do you think it means to them?
- What discussions/negotiations go on before sex takes place? Why?
- What expectations are there when young people are in a sexual relationship?
    - What number of partners on can have,

- The extent of faithfulness
- Anticipate getting married to this partner?

- Do young people of your age actively abstain from having sex? Why?

Risk perceptions

- Do you think that people of your age take risks of any sort during sex? Like having sex without a condom, having sex with different people? having sex with commercial sex workers etc?
- Why would they take such risks?
- Do they usually know these are risks?
- Do men and women take the same or different risks
- Are young people more worried / concerned about pregnancy or HIV/AIDS and other STIs?
- Why?

KNOWLEDGE OF STIs/STDS

What are STIs/STDs?

- What types of STI/STDs do you know?
- What are the signs and symptoms of STIs/STDs?
- Are young people like your age able to assess reproductive health care like treatment for STDs/STI? Post abortion services, ante and post natal services etc?
- Why don't they?

8.3.2.5 Negotiation for condom use.

- Do young people of your age negotiate for condom use?
- If yes, why, if no, why not?

- How do young girls of your age negotiate for condom use?

males

Sources of information

- How do young people of your age usually find out about relationships, sex and contraception?
- Whom or what do young people rely on for information?
- Do young people of your age talk openly to other people about sex and related issues?
- If yes, what is discussed? If no, why not?
- Whom or what are the most important sources of information to young people? Why?
- Do young men of your age talk about sex with friends? If yes, what is discussed. If no, why?
- Does this tend to be with male and/or female friends? Can you explain your reasons for the choice?
- With one person or in groups? Why this choice?

Sexual behaviours

- At what age do young people start having boyfriends and girl friends?
- Is having boy or girlfriend encouraged / discouraged or influenced in anyway? If yes, why?
- Usually by who?
- What does having a boyfriend or a girl friend involve?
- Why do you think men of your age have sex?
- What do you think they get out of it?

- What do you think it means to them?
- What discussions/negotiations go on before sex takes place? Why?
- What expectations are there when young people are in a sexual relationship?
    - What number of partners on can have,
    - The extent of faithfulness
    - Anticipate getting married to this partner?
- Do young people of your age actively abstain from having sex? Why?

Risk perceptions

- Do you think that people of your age take risks of any sort during sex? Like having sex without a condom, having sex with different people? having sex with commercial sex workers etc?
- Why would they take such risks?
- Do they usually know these are risks?
- Do men and women take the same or different risks?
- Are young people more worried / concerned about pregnancy or HIV/AIDS and other STIs?
- Why?

KNOWLEDGE OF STIs/STDS

- What are STIs/STDs?
- What types of STI/STDs do you know?
- What are the signs and symptoms of STI/STD?
- Are young people like your age able to assess reproductive health care like treatment for STDs/STI? Post abortion services, ante and post natal services etc?
- Why don't they?

Negotiation for condom use.

- Do young boys of your age negotiate for condom use?
- If yes, why, if no, why not?
- How do young boys of your age negotiate for condom use?