

# CHAPTER ONE

## INTRODUCTION

### 1.1 Background Information

Globally the HIV/AIDS pandemic poses a great challenge to all. It threatens the wellbeing of the continent like no other single challenge. According to Piot (2008), the Executive Director of the Joint United Nations Programme on HIV/AIDS, Geneva, AIDS is viewed as an unprecedented development challenge in Africa requiring a long-term sustained response, and that after 25 years, it is time to apply the lessons of experience and scale up what is working, the best way to stop people from dying from AIDS is to reduce new infections in the first place. HIV/AIDS remains the leading cause of premature deaths and is a major threat to development in Africa (Ezekwesili, 2008). Up to date the most reliable means of combating the disease in developing countries has been predominantly built around sensitizing people especially the youth to develop positive sexual attitudes. Behavioural change therefore has and continues to be pivotal as far as the strategies to combating HIV/AIDS are concerned.

Adolescents worldwide are sexually active and tend to engage in risky sexual behaviour. It is estimated that about 15 million adolescents aged 15 – 19 years give birth yearly, 4 million obtain abortion, and about 100 million become infected with sexually transmitted diseases (STDs) annually (USAIDS, 1997). Globally, about 40% of all HIV/AIDS cases involve the youth aged 15 – 24 years and it is estimated that about 7000 youth are infected daily (UNAIDS,2001).

Educational institutions, especially those at the basic levels play a role in promoting positive sexual behaviour among young people. However issues relating to sex and its practices continue to challenge most educational facilities especially those in developing countries including Ghana. Sexual health education for children and young adults is one of the most hotly debated and emotional issues facing policy makers, national AIDS programme planners and educators today. Arguments have raged over how explicit educational materials should be, how much there should be, how often it should be given, and at what age to initiate education. Indeed, the

question has been asked: Why educate adolescents about sex, sexual health and sexually transmissible diseases (STDs) at all?

Ghana has experienced a high growth rate of the youth population over the last two decades ( EU – Ghana Cooperation, 2006 ) The early sexual maturation among girls and boys, together with a tendency for sexual activity to begin at younger ages than later, have increasingly placed adolescents at risk of sexually transmitted infections (STIs) including HIV/AIDS. In many African communities such as Ghana, the transition from late childhood to adolescence occurs in the context of rapid social change that disrupts family life. Hence, social and religious institutions, such as the extended family, the church and mosques, which once governed values, rites of passage, and marriage, have been largely replaced by secular institutions (Ampomah, *unpublished* ). The extent to which these social changes affect adolescents is a source of concern in such societies like Ghana. Policy and service organizations are focusing on perceived youth issues such as pre-marital sexual activity, unwanted pregnancies, out-of-wedlock births, illegal abortions, STIs and high levels of HIV and drug abuse (Glover et al., 2003).

Educational institutions in Ghana, play a collaborative role in shaping the total health development of the youth. The role is enshrined within the framework of the School Health Programme (SHEP). Relative to improving the sexual behaviour, all schools including Junior High Schools (JHS) are supposed to have lessons related to sex and safe sex practices and also encourage students to translate such lessons into practice. Junior High Schools in the Kumasi Metropolis, a cosmopolitan area, are expected to ensure that students in the schools have adequate knowledge about sex and sex life. However, the extent to which the schools have executed this important role, of promoting positive sex life of students, and the extent to which the students put into practice what they have been taught is of concern and hence this study.

## **1.2 Problem Statement**

According to the Ghana Demographic and Health Survey (GDHS, 2003), 38.0% of girls and 19.3% of boys aged 15-19 years are sexually active. Contraceptive prevalence rate among Ghanaian young women 15-19 years old was 13.0% (GSS, 2003). There is little information on the extent to which Ghanaian adolescents suffer from STIs, especially HIV, abortion and

unwanted pregnancies. The reported cases of HIV/AIDS among adolescents aged 10-19 as at December 2000 was 949. This figure represents only about 40% of the actual number of cases. Infection among females outnumbered that of males (female : male ratio 2:1) (Dowuona, 2005).

In the Kumasi Metropolis, majority of teenagers aged 13 – 19 years are in JHS. The schools provide tuition on sexual development and sexual practices for students. However, the students are exposed to varied environmental influences that could hamper positive sexual attitudes. This environment includes the exposure to alcohol, drugs, smoking, and discos among others. These exist and affect people living in cosmopolitan settings including the youth and students in JHS for that matter. Despite these efforts made by school administrators and tutors, there has not been any evidence as to the knowledge levels of students on sex and sexual practices coupled with the practices of safe sex amongst them. This study therefore is intended to bring to fore the sexual behavioural practices and challenges amongst JHS students in the Kumasi metropolis taking cognizance of the nature of organization of sexual education and behavioural change education in JHS.

### **1.3 Research questions**

1. What is the extent of knowledge of students of JHS on sexual behaviour in Kumasi Metropolis?
2. How does the knowledge about HIV/AIDS influence behaviour relative to alcohol, drugs and sex among JHS students in Kumasi Metropolis?
3. What is the extent of sexual activity of JHS students relative to sexual intercourse and use of methods against STDs in Kumasi Metropolis?
4. How is sex education organized in JHS in the metropolis?

### **1.4 Main Objective**

The main objective of this study is to assess the extent to which the organization of sexual education for students in JHS influences their behaviour regarding safe sex conduct against the risk of HIV/AIDS and STDs in general.

### **Specific Objectives**

1. To describe the extent of effectiveness of organization of sex education at JHS in the Kumasi Metropolis.
2. To assess students knowledge about sex and sexual behaviours against HIV/AIDS in Kumasi Metropolis.
3. To determine the extent to which student knowledge influences their exposure to alcohol, drugs and unsafe sex in Kumasi Metropolis.
4. To establish the extent of sexual activity and practices amongst students in Kumasi Metropolis.

### **1.5 Rationale of the study**

Young people are a great asset to a nation because they are the future leaders. The socio-economic cost of the effects of HIV/AIDS on this group of people cannot be underestimated. Huge costs relative to human and economics have attracted the attention of many nations including Ghana. In fact, the essence of the existence of the Ghana AIDS Commission is founded on the detrimental cost of HIV/AIDS to the nation. Unfortunately, exposure of young adults to unsafe sex, drugs and alcohol abuse seem to be on the increase. These practices constitute risk behaviours accounting for the incidence of HIV/AIDS.

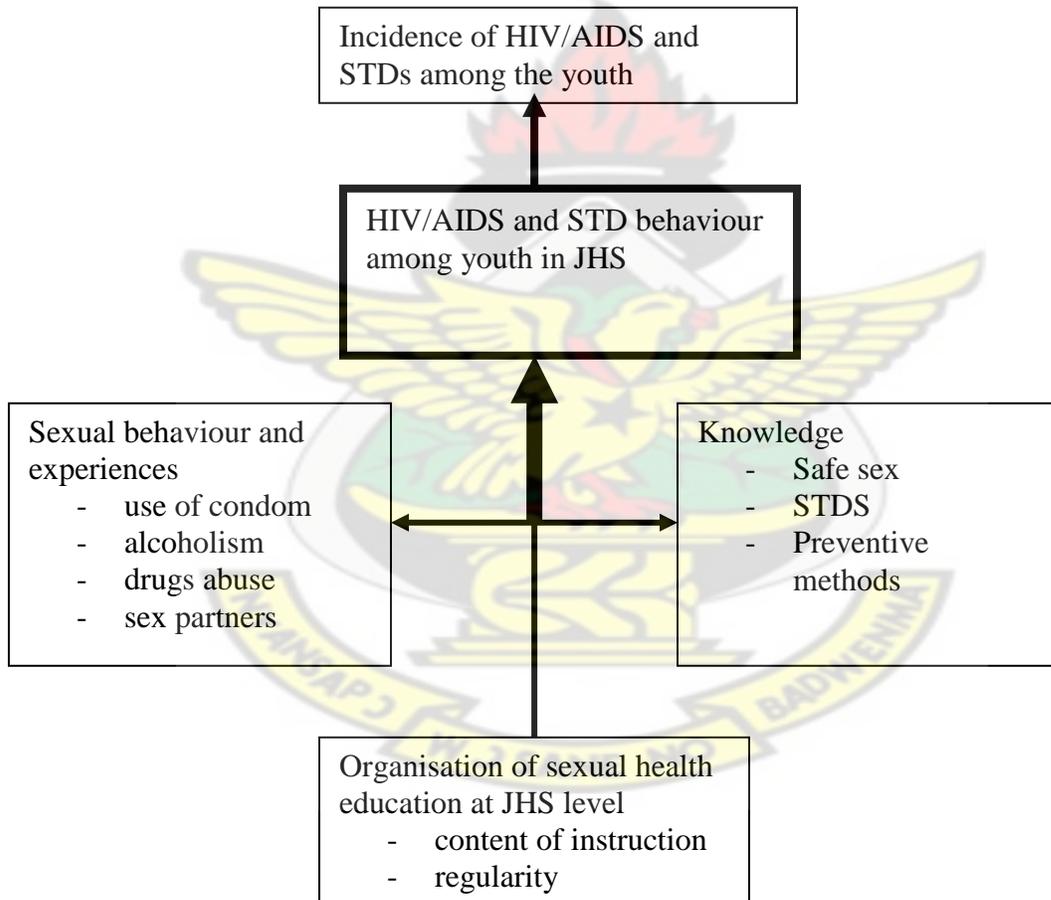
In an attempt to address the problem of HIV/AIDS, all stakeholders and sectors of every country are involved. The Ministry of Health, Ministry of Youth and Sports, and Ministry of Education among others contribute significantly to this course. The latter teaches, educate and enculturate young students, including those in JHS on positive and safe sexual conduct. Their efforts need to be improved to achieve greater success in building a healthy youth for this nation.

The evidence of this study therefore would assist all stakeholders especially the Ministry of Education, Local Government, Ministry of Health, among others on how strategies aimed at positively sensitising and developing better safe sex practices among the youth in JHS could be

enhanced. This study therefore would inform policy, curriculum development, instruction designs and also general information education and communication on HIV/AIDS and safe sex practices among the youth in JHS in Ghana.

### 1.6 Conceptual Framework

Figure 1: A conceptual framework showing the relation between the HIV/AIDS and STDS behaviour among youth, and factors that influences it.



Source: Author's construct, 2009

There are diverse issues that influence the sexual behaviour of the youth towards HIV/AIDS and STDs. These factors are closely related and complex. The interaction amongst them is intended to shape positively the behaviour of the youth towards a healthy sexual life that would prevent them from contracting STDs and HIV/AIDS. Unhealthy sexual behaviour could expose the youth to HIV/AIDS infection and other STIs.

In the JHS institutions an effective organisation of sexual behaviour through effective instruction designs and planning could influence positively but not absolutely on the youth. This is intended to stimulate their awareness and also inculcate in them hard facts about certain practices that could expose them to HIV/AIDS. On the other hand, in-effective organisation of educational instruction on sexual health could affect them negatively creating general unawareness and lack of sensitisation to sexual knowledge, experiences and risks. This would pose great problems to the youth as they would become vulnerable and susceptible to misinformation, peer influence and other influences.

Knowledge about sexual behaviour would result from exposure through tuition and guidance from the schools coupled with support from other community or societal organisations such churches. The knowledge about safe sex practices, preventing STDs and HIV/AIDS would inform the practices that would be built by the youth. Adequate knowledge would consequently lead to healthy sexual life of the youth into adulthood whereas poor or inadequate knowledge would result in making the youth gullible to bad sexual influences including multiple sexual partners, alcoholism and drugs addictions. Drug abuse and alcoholism influence youth into early sexual acts that are usually unsafe and pose a risk to contracting STDs including HIV/AIDS. Youth who have the right training from schools and society and who are able to control themselves from the use of drugs and alcohol could less likely be at risk of STDs and for that matter, HIV.

The relation between school instruction and organisation of sexual and reproductive health issues influences the knowledge level of students thereby affecting their behaviour relative to better and safe sex practices that limit their vulnerability to HIV/AIDS.

## **1.7 Organisation of Report**

This report is organised into six chapters. Chapter one elaborates on the background of the study, problem statement and its objectives among others whereas chapter two reviews related literature to objectives of the study. The methodology, results and discussion of the findings are detailed in chapters three, four and five respectively and the last chapter, chapter six, provides the conclusions and recommendations of the study.



## CHAPTER TWO

### LITERATURE REVIEW

#### 2.0 Introduction

This chapter seeks to review literature relevant to the study. The purpose is to explore what has been done in reproductive health and HIV/AIDS and provide a background and a basis for making generalization for the study.

#### 2.1 Knowledge of adolescents on sexual development and reproductive health

Adolescents' lack of knowledge on early sexual development and reproductive health poses a risk through unprotected sex in young people. This is reflected in disproportionately high rates of STD infection (Rosenthal et al, 1994; and Maxwell et. al., 1995; Clark et al, 2002) and unwanted pregnancy. Higher rates of STD infection have been associated with earlier initiation of sexual intercourse (Rosenthal, et. al., 1994; Jejeebhoy, 2006). Educating adolescents on contraception, HIV, and STD prevention has been shown to be effective in reducing these unintended consequences (Daires, et. al., 1989; Bloodindex, 2007). Unfortunately, parents, although keen to help their children, still do not communicate adequately with them about sex, mainly due to the fact that many parents feel inadequate to the task (Geasler et al., 1995; DeJong et al., 2007), and therefore are often embarrassed and uncomfortable to approach their children with the topic (BBC News, 2000). In recent times, children have turned, particularly to more formal sources of sexual health education such as school-based lessons (Wellings et al., 1995).

#### 2.2 Practices in relation to sexual behaviour, HIV and STDs

Adolescence, a stage such as that of students of JHS, is an important stage of life for establishing healthy behaviours, attitudes, and lifestyles that contribute to current and future health. Many adolescents are sexually active, although not always by choice and in some religions as many as half are married (Blanc, et. al., 1998). Adolescents may experience resistance or even hostility

from adults when they attempt to obtain sexual and reproductive health information and services they need.

Sexual debut for most young people occurs during their teenage years. Sexual experience among young people has been estimated in a number of countries: At age 15 years, 53% of young people in Greenland, 38% of young people in Denmark (Werdelin et al, 1992), and 69% of young people in Sweden (Klanger et al, 1993) have experienced intercourse. By age 18 years, the percentage that are sexually active has been reported as 54.1% in the United States, 31% in the Dominican Republic (Westhoff et al, 1996), 66.5% in New Zealand (Paul et al., 1995), and 51.6% in Australia (Rodden et. al, 1996). Age of debut has been estimated at a median of 17 years in England (Wellings et al., 1995) and a mean of 15.95 years in the United States (Zelnik, 1983), and 16.8 years in Sweden (Schwartz, 1993). Therefore, the majority of young people have begun to have sexual intercourse before they leave their teens, and at least half by the age of 16.

Use of contraceptives and STD prevention have been reported to vary across adolescence according to the age at which initiation occurs. Condoms and contraception are more likely to be used when sex is initiated at later age in adolescence ( Zelnik, 2003). Education on these topics has been found to be more effective if given prior to first intercourse (Howard et al, 1990), that is, in adolescence or pre-adolescence. Sexual partner turnover rate is greater during adolescence and the early twenties than in later years (Billy, 1993; Paul et. al., 1995). This is true not only for numbers of casual partners, but also for those relationships perceived as being regular and monogamous (Rosenthal et. al, 1990). Although these serially monogamous pairings may be of short duration, their regular status, in the minds of many of the young people in them, confers safety with respect to STD transmission (Rosenthal et al., 1990). Unprotected sex is viewed as not risky because the partner is a regular partner as opposed to a casual one. Thus unprotected sex occurs with multiple partners, but the cumulative risk is rendered invisible by the apparent monogamy and commitment of each discrete relationship.

A study in Nigeria showed that the level of sexual activity and the incidence of sexually transmitted diseases (STDs) are high among Nigerian adolescents, but use of reproductive health services is low. Information about their attitudes and experiences is needed for the design of youth-friendly programs. Twenty-four single-sex focus group discussions were conducted among

young people aged 15-20 attending secondary schools in Benin City. The discussions explored the adolescents' perceptions of sexual behaviour among their peers, their knowledge of STDs and their preferred means of preventing and treating STDs. The participants perceived that sexual activity is common among their peers. They noted that although physical attraction is the main reason for romantic relationships (which might include sex), the desire for material or financial gain is the primary motivation for sexual relationships. The young people had some knowledge about STDs, especially HIV and AIDS, but many believed infections were inevitable. When they had an STD, most went to traditional healers; they were unlikely to seek treatment from doctors because of high cost, slow service, negative provider attitudes toward young people and a perceived lack of confidentiality. The participants considered media campaigns as the best way to educate young people about STDs and condom use. Finally it was concluded that using media campaigns to educate adolescents about risky behaviour and condom use (Keating et al., 2006), educating parents about reproductive health and communication with adolescents, training medical providers in low-cost diagnosis and treatment techniques, and establishing youth-friendly services that emphasize sensitivity and confidentiality would be helpful in reducing high-risk sexual behaviour and controlling the spread of STDs (including HIV and AIDS) among young people in Nigeria (Temin et. al., 1999; Satcher, 2001; Bertrand, and Anhang, 2006).

A school-based study was also conducted among Mexican young people on condom use, other sexual behaviours, and HIV/AIDS knowledge. Students (n=13,293, 11-24 years of age) from a random sample of public schools in the central Mexican state of Morelos completed a self-administered questionnaire. The results obtained were that the average age at sexual debut was  $13.6 \pm 1.9$  years among young men and  $14.2 \pm 2.2$  years among young women; 34.5% of sample participants reported using condoms during their first sexual intercourse. More students had intermediate HIV/AIDS knowledge levels (46%, 95% confidence interval [95% CI], 45.2-46.9) than high levels (37%, 95% CI 36.2-37.8,  $p < 0.01$ ). Students knew more concerning HIV transmission than about prevention of HIV infection. Among young men, high levels of HIV/AIDS knowledge increased likelihood of condom use (odds ratio [OR] 1.4, 95% CI, 1.1-1.7), while among young women high levels of knowledge decreased likelihood of using condoms (OR 0.7, 95% CI, 0.5-1.0). Young men with high levels of HIV/AIDS knowledge were more likely to have had three or more sexual partners (OR 1.7, 95% CI, 1.3-2.2), but young

women with high knowledge levels were more likely to have only one lifetime sexual partner (OR 0.6, 95% CI, 0.4-0.9) (Uche et. al., 1997). It was finally noticed that levels of knowledge with regard to HIV/AIDS were low in Mexican youth and that HIV/AIDS education programs for Mexican students should focus on conveying knowledge on HIV prevention. Because apparently knowledge is not directly correlated with condom use among young women, prevention strategies that deal with social acceptability of condoms and social skills related with condom negotiation are also needed. (Tapia et al, 2004).

Adolescent reproductive health is affected by pregnancy, abortion, STDs, and limited access to information and clinical services. Reproductive health also is affected by nutrition, psychological wellbeing and economic and gender inequalities that can make it difficult to avoid coerced or commercial sex (Gage, 1998; UNAIDS, 2002). Data have shown that young women who experienced a coerced first intercourse compared with those who did not were significantly less likely to use condoms at last intercourse (13% versus 33%); significantly less likely to have consistently used condom over the last six months (7% versus 25%); and were more likely to report that they had never used condom (75% versus 59%) (Koenig et al., 2004).

### **2.3. Views of adolescents on unintended pregnancies, abortion and HIV / STDs**

Sexual activity puts adolescents at risk of various reproductive health challenges. Each year about 15 million adolescents aged 15-19 years give birth, as many as 4 million obtain abortion and up to 100 million become infected with curable STDs. Globally, 40% of all new HIV infections occur among 15-24 year olds. It is estimated that 7000 are infected each day (UNAIDS, 1997). In nineteen African countries, five or more percent of females aged 15-24 are infected with HIV (UNAIDS, 2002). Reports on the Global AIDS Epidemic reports low and high estimates of HIV prevalence among girls and boys aged 15-24, ratios of new female –to-male infections among those aged 15-24 are as high as 8:1 in South Africa (Shyisana, et al., 2005).

In Nigeria 2,460 secondary school students were surveyed in two south eastern Nigerian states. Of the students who supplied information about their sexual activity, 40% had had intercourse; the proportions who were sexually experienced climbed from 26% of 14-year-olds to 54-55% of 18-19-year-olds. While 36% of the young women had had sexual partners who were roughly their age, 25% had been involved with older businessmen; the young women said they have

intercourse more frequently and are less likely to restrict intercourse to the safe period of their cycle when they are involved with older partners than when they have boyfriends their own age. Only 17% of sexually active students had ever used a contraceptive method other than abstinence. In focus groups and in-depth discussions, students expressed a strong desire for better education about contraception and the consequences of sexual intercourse, and recommended that both schools and parents participate in educating young people about reproductive health (Uche, et. al., 1997).

#### **2.4. Socio-economic and cultural issues affecting adolescent sexual behaviour**

Compared to women in their twenties, adolescents ages 15 to 19 are two times more likely to die during childbirth, and those aged 14 years and younger are five times more likely ( UNICEF, 2000). What happens between the ages of 10 and 19, whether for good or ill, shows how girls and boys live out their lives as women and men, not only in the reproductive arena, but in the social and economic realm as well. Yet despite its impact on human development, adolescents have been side lined as a research and policy subject in developing countries (Mensch et al 1998). Youth risk behaviour, a general term used to describe adverse health behaviours adopted in childhood or adolescence is one indicator of the health of young people that serves as a basis for measuring adolescent health over time as well as a target for health policies and programs.

Young adolescents are more likely than older adolescents to be in residence with parents and in school; however their absence from school or lack of parental support (i.e. surprisingly high proportion of 10-14 year olds live with one or neither parents in many parts of sub-Saharan Africa) may be a cause for concern. While some of these young people not reside with a parent, may be with the extended family, or in positive fostering or protective living arrangement, it is notable that many are vulnerable to sexual exploitation, unsafe work and substance abuse (Chong, et. al., 2006).

#### **2.5. Availability and accessibility of Sexual health services**

Family life education programs are usually school based (Askew, et. al., 2004). Peer education is possibly the most elusive programme concept. A young person reaching out to each other with information as friends is logical and appealing, but has been subject to little evaluation. An

evaluation of peer education programs in Ghana concluded that the greatest effect was found among secondary school students. No evidence of effect was found among adolescents. (Brieger et al., 2001). In addition, some evidence shows that more boys are reached than girls. Studies from Ghana, Nigeria, Kenya and South Africa suggest that two factors behind differential participation in peer education programmes are girls' greater concern about confidentiality and selectivity about whom they speak to on sensitive issues, (Oyediran, et. al., 1997) and their desire (despite wanting to keep a dialogue channel open with peers) to learn about reproductive health issues from someone older than themselves.

Teens have access to reproductive health services through private organizations and school-based services. Planned Parenthood Federation of America provides education and reproductive health services but targets older teens and young adult women for services. School-based health centres, partly funded through Maternal and Child Health Bureau grants as well as by private foundations, provide health services for more than half a million teens in the United States; however, only 26 percent of the school-based health centres that serve teens provide access to condoms or contraception (Fothergill K, 1998). Emergency contraception (morning after) — has been legal for over 20 years, but has been relatively unknown and unused by women in the United States. Slightly more than 28 percent of U.S. teenagers have heard of emergency contraception (Delbanco et al, 1998). Many teens in the U.S. are unaware of and fail to seek appropriate reproductive health services in a timely manner, and a pregnancy or STD often drives U.S. teens to seek reproductive health services.

In Ghana, the Planned Parenthood Association of Ghana has spearheaded sex education in schools and communities. Clubs have been formed and peer counsellors trained to handle reproductive health among the students (Acquah, *pers. comm.*).

## **CHAPTER THREE**

### **METHODOLOGY**

#### **3.1 Study Design**

This is a descriptive cross-sectional study that assessed the risk behaviours on the youth in JHS schools in the Kumasi metropolis and within the context of the management, planning and organisation of classroom instructions on sexual health behaviour in the selected JHS schools. The study conducted in September – October 2008 in the Kumasi metropolis focused on students' knowledge on sexual health, their sexual behaviour and practices and also the organisation of sexual health instruction.

#### **3.2 Study Area**

Kumasi is the second largest city in Ghana and it is the administrative capital of the Ashanti Region - a rich forest area of the country. It is located 300 km Northwest of Accra, the national capital. Kumasi has been the crossroads between the northern and southern sections of the country since its establishment as the heart of the Ashanti Empire around the turn of the eighteenth century. Kumasi is located in the transition forest zone and is about 270 km north of the national capital, Accra. It is between latitude  $6.35^{\circ}$  –  $6.40^{\circ}$  and longitude  $1.30^{\circ}$  –  $1.35^{\circ}$ , an elevation which ranges between 250 – 300 metres above sea level with an area of about 254 square kilometres. The unique centrality of the city as a traversing point from all parts of the country makes it a special place for many to migrate to. The metropolitan area shares boundaries with Kwabre East District to the north, Atwima District to the west, Ejisu-Juaben Municipal to the east and Bosomtwe to the south. The 2000 Population Census kept the population at 1,170,270. It was however projected to 1,610,867 in 2006.

#### **3.3 Traditional and Political Structure**

Traditionally the metropolis is the seat of the Golden Stool, the Asante Kingdom. The Asantehene is the King and the traditional head of the Kumasi traditional area. He provides

traditional leaderships through his divisional chiefs in all the communities in and around the metropolis. The traditional leadership has great interest in building the educational capacity of the youth and also provides health interventions relating to HIV/AIDS and STDS.

Politically, the Regional Minister, the Metropolitan Chief Executive, Assembly men and Unit Committee members and Members of Parliament elected in the area, ensure that government policies are implemented as intended. The metropolis which is divided into five sub-metros namely: Subin, Tafo, Asokwa, Bantama, and Nhyiaeso, has 18 town councils in the metropolis. The political leadership provides administrative and political support to the educational system and in collaboration with agencies and the traditional leadership see to the organisation and implementation of sexual health issues. It further discusses problems associated with the youth and educational systems for action.

### **3.4 Social Services**

#### **3.4.1 Transportation**

Virtually all the trunk roads and community links in the city are tarred. Vehicles both private and commercial are numerous. This facilitates access to educational institutions (except a few) and also social services for the youth including libraries, hospitals and clubs.

#### **3.4.2 Communication**

The youth in the metropolis have access to about five mobile telecommunication facilities, the internet and over 20 radio stations. This communication channels are used among other things, to educate, communicate and reinforce behaviour related to sexual practices. The radio exposure in the city and its content are diverse and influences the youth in many ways including sex conducts.

#### **3.4.3 Education**

There are over 300 Junior Secondary Schools (JHS) distributed across the metropolis. These schools, private and public owned, are managed by the metro educational office which also reports to the Regional Education Office. The schools enrol over 100,000 young boys and girls and implement the national curriculum relative to the knowledge and practices on sexual health.

There are 171 public JHS in the metropolis with an enrolment of 48,860 students. For proper administration, these schools have been grouped under 10 circuits with each headed by an assistant director.

#### **3.4.4 Health Administration and Services**

The metropolis has over 100 public and private hospitals and clinics. The Metro Health Directorate is responsible for the coordination and supervision of all health services including those rendered in schools. In this regard, the directorate collaborates with the Metropolitan Education Service in ensuring effective implementation of the School Health Programme (SHP). This collaboration is not only in the form of streamlining curriculum to meeting challenging reproductive health needs of students, but also providing facilitators and services provider like nurses to educate and screen students on disease conditions.

Public and private health workers and Non-Governmental Organizations (NGOs) are working together in the area of HIV/AIDS in the Metropolis. The Metropolitan Committee on HIV/AIDS is the main agency responsible for HIV/AIDS control activities in the Kumasi Metropolis. It collaborates with health staff in the various hospitals in the implementation of its activities. It has drawn up a 5 Year Strategic Plan (2006-2010) for the fight against HIV/AIDS in the metropolis.

The main activities include;

- Information, Education and Communication (IEC) on the disease.
- Distribution of educational materials
- Sale of condoms
- Prevention of Maternal to Child Transmission (PMTCT) of HIV/AIDS and Voluntary Counselling and Testing (VCT) services at Kumasi South, Suntreso, Tafo, Manhyia, and Maternal and Child Health Hospitals, Bomso Clinic, Aninwaa Medical Centre, KNUST hospital, Kwadaso, SDA Hospital and KATH.
- Anti retroviral treatment at KATH, Kumasi South Hospital and Bomso Clinic.
- Treatment of opportunistic infections.

Data from 2004 Sentinel Survey reported a 3.1 per cent national rate for HIV/AIDS, 3.0 per cent prevalence rate for Ashanti and 2.4 per cent for the Kumasi Metropolis. It must be emphasized that a lot more cases of the disease are not reported. These figures are therefore based on reported cases only.

### 3.4.4.1 Adolescent Reproductive Health Services

Staff in almost all the public health institutions have been trained to offer services to adolescents. Four of the Sub Metro facilities except Tafo have their adolescent centres refurbished. Adolescent Reproductive Health activities take place both at the hospital and outside the hospital. It includes the prevention of teenage pregnancies, STIs and HIV/AIDS.

### 3.5 Study Population

This comprise of students and teachers in JHS at the Kumasi Metropolis and also the School Health Programme (SHP) Coordinator at the Metro Education Directorate. The teachers were viewed in this study as Schools Health Coordinators as they play seminal role in health issues of the students.

**Table 3.1. Study variables**

Variables	Operational definition	Scale of measurement
Age	Years at last birth day of respondent	Interval
Religion	The religious belief of the respondents (e.g. Christian, Moslems, traditionalist)	Nominal
Living status	Living with someone under supervision (e.g. live alone, with parent, relative etc)	Nominal
JHS class	Class in which respondent is in (e.g. JHS one, JHS two, or JHS three)	Nominal
Sexual behaviour	Responses to several questions including <ul style="list-style-type: none"> <li>- drinking of alcohol</li> <li>- taking of hard drugs e.g: cocaine</li> </ul>	Nominal

	<ul style="list-style-type: none"> <li>- having had sexual intercourse in the last 12 months</li> <li>- number of sex partners</li> <li>- use of protective measures e.g. condom</li> <li>- having sex with commercial sex workers</li> </ul>	<p>Nominal</p> <p>Nominal</p> <p>Nominal</p> <p>Nominal</p>
Knowledge of HIV/AIDS and STDs	<p>Responses to several question including</p> <ul style="list-style-type: none"> <li>- hearing about STIs</li> <li>- description of the symptoms of STDS in both men and women</li> <li>- state the mode of spread of STIs</li> </ul>	<p>Nominal</p> <p>Nominal</p> <p>Nominal</p>
Organisation of sexual health at JHS	<p>Responses given by school health coordinators based on several question</p>	<p>Nominal</p>

**Source: Author's, 2009**

### **3.6 Sample size and sampling technique**

#### **3.6.1 Sample size**

With an estimated population of 48860 students in 171 public schools across five sub-metros, a sample size of 300 students was determined based on a population variance of sexual health instruction of 50% with a worst acceptable variance of 44.36% and at 95% confidence interval and with 5% error margin. This was determined using population survey menu of EPI STAT Calc version 4.0.1.

In addition, 18 school health coordinators were selected. A total of 30 schools were involved in the study.

#### **3.5.2 Sampling technique**

In all, a total of thirty schools were selected. A compilation of all public schools in the metropolis (urban and peri-urban) was made and fed into a computer. Thirty schools from various sub-metros were then selected by info-technological random sampling.

Ten (10) students were interviewed per selected school. In the selected schools, students were selected based on the proportional distribution of sex and also the students' population in the three levels of JHS (i.e. JHS one, two and three). Students names in each class were compiled and the representative sample randomly chosen by calling students to pick from a pre-coded pieces of papers.

The school health coordinators were purposively selected based on their role in coordinating all school health programmes. In all, eighteen (18) school health coordinators, one from a selected JHS were interviewed.

### **3.6 Data Collection Technique and Tools**

The techniques employed for data collection was a standardised questionnaire and interviewer administered method for the students and school health coordinators respectively. The questionnaire used for this study (Appendix I) was patterned after the Behavioural Surveillance Survey (BSS) for Youth developed and employed by Family Health International (2000). The researcher's interview guide was developed based on the background of the students, their sexual and risk behaviour assessment and knowledge about STIs. In addition the coordinators were also interviewed based on the experiences and the regulations relating to the organisation of sexual health topics in the selected institution.

### **3.7 Pre-testing**

A pre-test of the research method was carried out with 30 students at a public school in Atwima that shared border with Kumasi Metropolis. This was to assess the logical sequence of the items and to clarify the wording of the questionnaire, the feasibility of the design procedure for data processing analysis and any potential problems. The pre-testing revealed the reactions of respondents to the research procedures and to questions related to sensitive issues such as sexual

intercourse and experience. Their reactions and responses were included in the final design of the tools and procedures for the study.

### **3.8 Data Processing and Analysis**

The data instruments were coded based on the schools selected and the respondent chosen. The data collected was checked for completeness and accuracy with the interviewee before filed, collated and kept in a safe. The data was then entered in a pre-designed template in the Statistical Package for Social Sciences (SPSS) software, version 15.0. The entered data was validated with the hard copies to ensure accuracy and consistency in response and also to eliminate data entry errors. The data was then analysed with SPSS version 15.0 using descriptive and inferential statistics. Descriptive statistics showed responses in proportions, means whereas 95% confidence interval, chi square and p-values were used for purposes of making inferences. The result was presented in tables, graphs and charts.

### **3.9. Ethical Issues**

The proposal of the study was approved by the Community Health Department following which an introductory letter was issued for implementation. The Metro Educational Office and the respective Sub-Metros management team consented to the implementation of the study.

For the selected students and school health coordinators, their approval was sought before interviewed. The consent addressed issues relating to confidentiality of their responses. The students and school health coordinators were assured that their names were not required in order to participate in the study and that they were at will to complete or discontinue the interview at any time without a penalty. They were further assured that the responses provided would not be associated with them now or in the future and that it would not affect their relationship with the schools or education authorities now or in the future.

### **3.10. Limitation**

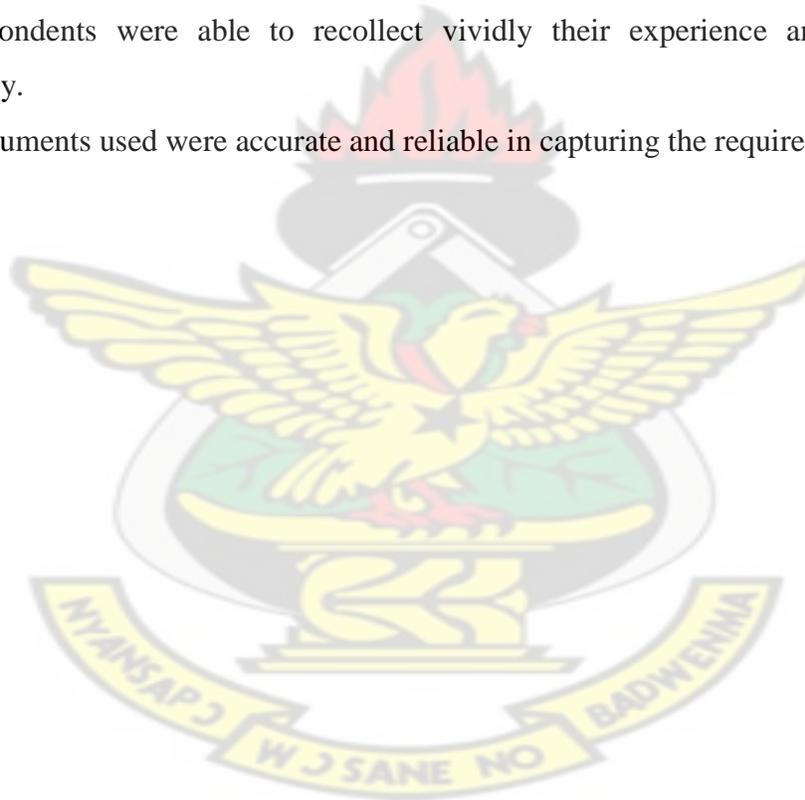
Holidays of long vacation for basic schools caused a delay in data collection.

The study was also limited in terms of examining representation of students in private schools. Other teachers did not agree to be interviewed in place of those responsible for reproductive health or related topics. The low standard of English language in most public schools made interviewing of students difficult. The planning of the study based on resources affected the decision to use two schools per sub-metro however; it is presumed that the characteristics of the selected schools do not vary with other schools within the same sub-metro.

### **3.11. Assumptions**

The following assumptions were made:

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



## CHAPTER FOUR

### RESULTS

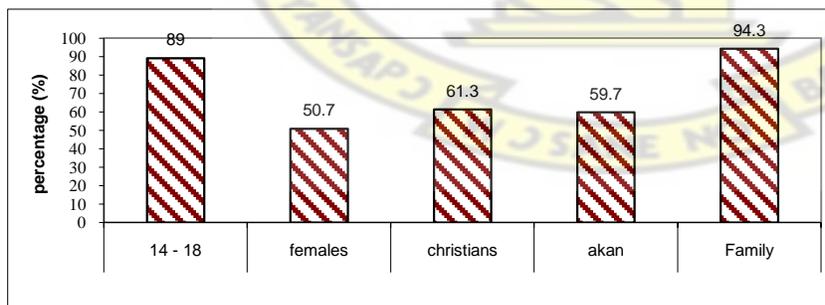
#### 4.1. Introduction

This section of the study covers the presentation of findings made from the responses given by the students and the health coordinators in the selected schools. In all a total of 300 students and coordinators responded to the study questionnaire.

#### 4.2. Background characteristics of students

As shown in figure 4.1 below, the average age of the students was 15.44 years with a standard deviation of 1.52 years. The minimum year was 12 and the maximum years, 19. Over eighty percent (89%) of the students were aged 14 – 18 years. Fifty percent (50.7%) were females and the rest, males. Christians, Moslems and traditionalist formed 61.3%, 37.3% and 1.4% respectively. The students had mixed ethnic group (7%), Akans (59.7%) and northern descent (23.7%) as detailed in table 4.1 above. Over ninety percent (94.3%) lived with their family whilst 2.7% lived alone. Fifty three percent (53.3%) of the students had been absent from school due to non payment of fees. For six percent of them school absence due to non-payment of fees was very often. Some (46) representing 15.3% of the students engaged in other work for income. The work included hawking, 69.6%, drawing of water, 8.7% and mechanic, 13.0%.

**Figure 4.1 Summary of background of respondents (N = 300)**



Source: field data

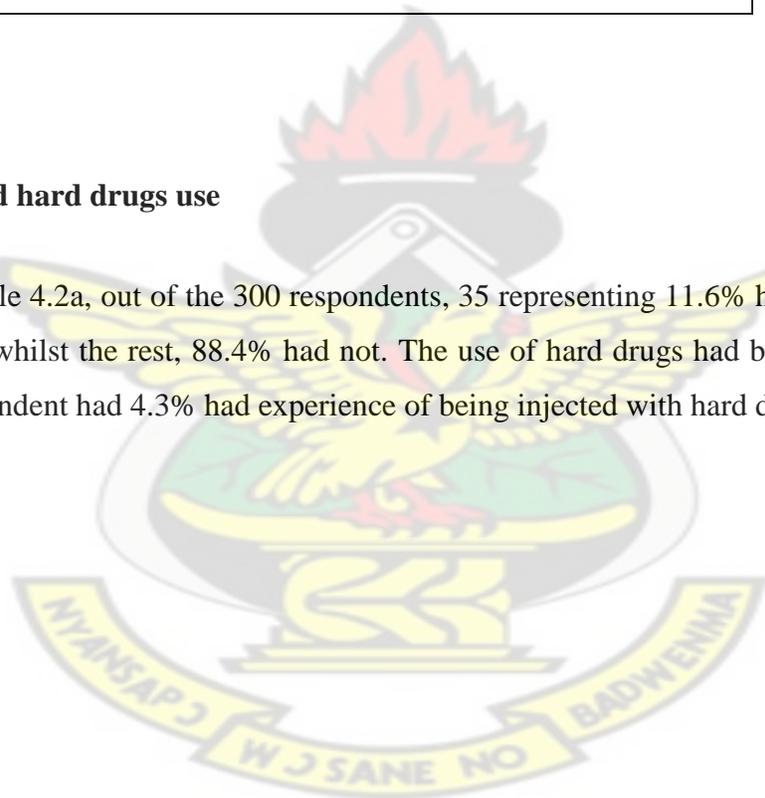
**Table 4.1 Background characteristics of respondents**

<b>Variable</b>	<b>Frequency (N = 300)</b>	<b>Percentage (%)</b>
<b>Age</b>		
< 14	24	8.0
14 – 18	267	89.0
19 and above	9	3.0
<i>Mean = 15.44; SD = 1.52; mode = 14; minimum = 12; maximum = 19</i>		
<b>Sex</b>		
Male	148	49.3
Female	152	50.7
<b>Religion</b>		
Christian	184	61.3
Moslem	112	37.3
Traditionalist	4	1.4
<b>Ethnic group</b>		
Mixed ethnicity	21	7.0
Northern descent	71	23.7
Akan	179	59.7
Ga Adangbe	15	5.0
Ewe	13	4.3
Nzema	1	0.3
<b>Live/ live with:</b>		
Alone	8	2.7
Family	283	94.3
Employer	7	2.3
Friends/peers	2	0.7
<b>Absence from school due to non payment of fees</b>		
Very often	18	6.0
Often	17	5.6

Sometimes	125	41.7
Never	140	46.7
<b>Work for income</b>		
Yes	46	15.3
No	254	84.6
<b>Type of work</b> (n=46)		
Hawking	32	69.6
Drawing of water	4	8.7
Mechanic	6	13.0
Shoe making	4	8.7

#### 4.2.1 Alcohol and hard drugs use

As detailed in table 4.2a, out of the 300 respondents, 35 representing 11.6% had taken alcohol in the last 4 weeks whilst the rest, 88.4% had not. The use of hard drugs had been experienced by 2.3% of the respondent had 4.3% had experience of being injected with hard drugs.



**Table 4.2a Alcohol and drug use among the respondents**

Variable	Frequency (N = 300)	Percentage (%)
Alcohol use in last 4 weeks		
every day	7	2.3
once a week	28	9.3
never	265	88.4
Drugs used		
Used drugs	7	2.3
Have not used drugs	293	97.7
Injection of hard drugs		
Yes	13	4.3
No	287	95.7

Analysis of the association of the use of alcohol, hard drugs and injection of hard drugs amongst JHS students showed in table 4.2b reveals that students who had taken alcohol were 8 times (OR = 8.41) more likely to have had sex. This was statistically significant (chi = 10.03, p = 0.00) however taking of alcohol and injection of drugs were not statistically associated with ever having sex (chi= 0.24, p = 0.62) and (chi = 0.03, p = 0.86) respectively.

**Table 4.2b Statistical analysis of the relationship between ever having sex and alcohol and drug use among students**

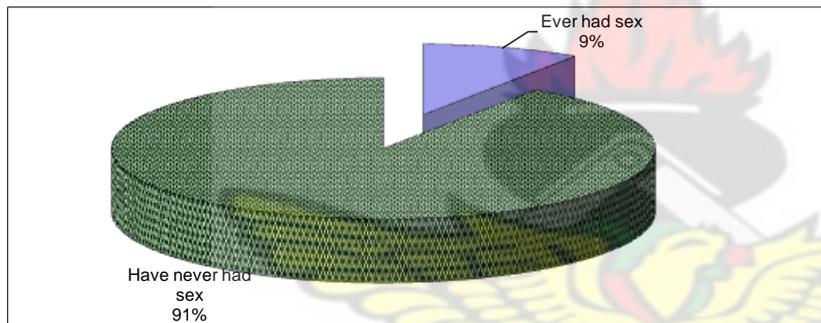
Variables	Chi square	p-value	OR
Taking of alcohol	0.24	0.62	0.82
Taking of hard drugs	10.03	0.00	8.41
Injection with hard drug	0.03	0.86	0.84

### 4.3. Sexual experiences

#### 4.3.1 First sexual experience

Table 4.3 shows the first sexual experiences of the respondents. Nine percent (27) of the students had ever had sex (see figure 4.2) and this exposure occurred when they were less than 10 years, 18.5%; 10 – 15 years, 25.9%; and 15 years and above, 55.6%. Out of the 27 student who had ever had sex, 10 representing 37% used condom and the rest, 63% did not. Over forty percent (44.5%) the student did not know how young or old their sex partners were as compared to their age.

**Figure 4.2**



**Source: field data**

**Table 4.3.a First sexual experiences of the respondents**

Variable	Frequency (N = 300)	Percentage (%)	% of all respondents
Ever had sex	27	9.0	9.0
Age at first sex (n=27)			
< 10 years	5	18.5	1.7
10 – 15 years	7	25.9	2.3

15 and above	15	55.6	5.0
Used condom in first sex	(n = 27)		
Used condom	10	37.0	3.3
Did not use condom	17	63.0	6.3
Age difference of partner	(n = 27)		
> 10 years older	5	18.5	1.7
5 – 10 years older	5	18.5	1.7
< 5 years older	3	11.1	1.0
Younger	2	7.4	0.6
Don't know	12	44.5	4.0

There was no association ( $\chi^2 = 0.02$ ,  $p=0.89$ ) between the sex of the student and having ever had sex. In addition, The person who pays the school fees of the students, the student working status, the type of work engaged by students who are working, their religion and ethnic background did not relate significantly ( $p>0.05$ ) in relation the experience of having ever had sex as detailed in table 4.3b below.

**Table 4.3.b. Association between background characteristics and ever having sex amongst JHS students**

Variable	Chi square or (chi for trend)	p-value or (p-value for trend)	OR
Sex of student	0.02	0.89	0.90
Person who pay fees	(5.57)	(0.35)	-
Student working status	1.08	0.29	1.67
Type of work of student	(0.59)	(0.74)	-
Religion	(3.36)	(0.50)	-
Ethnicity	(4.94)	(0.55)	-
Living status	(1.34)	(0.85)	-

### 4.3.2 Sexual experience in the last 12 months

Out of the 27 student who had ever had sex, seven (7) had sex in the last 12 months. This represents 25.9% among those who have ever had sex. Three of the seven students had two sexual partners representing 43.0%. Two student representing 28.6% had commercial sex partners whereas the rest (5 students) had non-commercial sex partners.

**Table 4.4 sexual experience of the respondent in the last 12 months**

Variable	Frequency (n = 27)	Percentage (%)
Had sex in last 12 months	7	25.9
Number of sex partners	(n = 7)	
One	4	57.0
Two	3	43.0
Number of:	(n = 7)	
Commercial sex partners	2	28.6
Non commercial sex partners	5	71.4
Had sex with same sex partner	(n = 7)	
Yes (a male respondent)	1	14.2

### 4.3.3 Sexual experience with Commercial sex partners

Out of the 27 students who had ever had sex, two (2) representing 7.4% had had a sexual encounter with commercial partners. All, the two students, used a condom in the last 30 days when they had sex with their commercial sex partners. They, the two students, decided themselves to use a condom and they, the two students indicated that the condom is used all the time as detailed in table 4.5.

**Table 4.5. Sexual experience with commercial sex partners**

<b>Variable</b>	<b>Frequency ( n =2)</b>	<b>Percentage (%)</b>	<b>% on sexually active respondents (n = 27)</b>
<b>Sex episodes over last 30 days</b>			
Once	1	50.0	3.7
Thrice	1	50.0	3.7
<b>Use condom in the last sex</b>	2	100.0	7.4
<b>Who suggest use of condom</b>			
Myself	2	100.0	7.4
<b>Frequency of use of condom with commercial partner</b>			
Every time	2	100.0	7.4

#### **4.3.4. Sexual experience with Non-Commercial sex partner**

Six students out of the 27 sexually active students representing 22.2% had had sex with non-commercial sex partner in the last 30days. Four out of the six students used a condom representing 66.7% whilst 33.3% did not. Among those who used a condom with the non-commercial sex partner, two took the decision on their own and the other two, was a joint decision.

**Table 4.6. Sexual experience with Non-Commercial sex partner**

<b>Variable</b>	<b>Frequency (n= 6)</b>	<b>Percentage (%)</b>	<b>% on sexually active respondents (n = 27)</b>
Sex episodes over 30 days			
Once	6	100.0	22.2
Use condom in the last sex			
Used condom	4	66.7	14.8
Did not use condom	2	33.3	7.4
Who suggested the use of condom	(n = 4)		
Myself	2	50.0	7.4
Joint decision	2	50.0	7.4

#### 4.3.5. Knowledge and experiences about Male Condoms

Over seventy percent (75.3%) of the respondents had heard about male condom whilst 24.7% claimed they have never heard about it. Out of those who had heard about male condoms, 84.9% knew where to get it. The places identified were: pharmacy, family planning centres, hospitals and shops representing 96.9%, 78.1%, 77.6% and 60.4% respectively as detailed in table 4.7 below. Those (192/226) who knew about a place for getting male condoms said that the time to access the condom ( e.g. walking to buy) was less than an hour, 69.8%, and more than an hour 21.8%.

**Table 4.7 Knowledge about male condom and its access**

<b>Variable</b>	<b>Frequency (N = 300)</b>	<b>Percentage (%)</b>
Heard of male condom		
Yes	226	75.3
No	73	24.7
<b>Place to get male condom</b>	(n = 226)	
Know	192	84.9
Don't know	34	15.1
<b>*Places or persons known</b>		

Shops	116	60.4
Pharmacy	186	96.9
Market	97	50.5
Hospitals/clinics	149	77.6
Family planning centres	150	78.1
Bars/guest house/hotels	136	70.8
Peer educators	88	45.8
Friends	85	44.2
Duration to access male condom	(n = 192)	
Less than one hour	134	69.8
More than 1 hour	42	21.8
Don't know	16	8.3

\* multiple responses

#### 4.3.6. Knowledge Sexually Transmitted Diseases (STDs) and its incidence among respondents

Two hundred and sixty out of the three hundred students interviewed had heard about STDs. This represents 86.7%. Out of those who had heard about STDs, 54.7%, 53.0%, 50.0% and 41.2% identified abdominal pains, burning pain on urination, genital discharge and genital ulcers/sores respectively as signs of STDs in women. In men the signs of STDs identified by the respondents were: burning pain on urination, genital discharge and genital ulcers and sores forming 69.6%, 50.3% and 42.6% respectively. Out of those who had heard about STDs, 11.1% had had genital discharge and 9.6% had had genital ulcers or sores in the last 12 months.

**Table 4.8. Knowledge on STDs and its symptoms**

Variable	Frequency	Percentage (%)
Heard of STDS	(N = 300)	

Heard	260	86.7
Not heard	40	13.3
*Symptoms of STDs in women	(n = 260)	
Abdominal pains	142	54.6
Genital discharge	130	50.0
Foul smelling discharge	97	37.3
Burning pain on urination	138	53.0
Genital ulcers/sores	107	41.2
Swelling in groin area	103	39.6
Itching	106	40.7
*Symptoms of STDs in men	(n = 260)	
Genital discharge	131	50.3
Burning pain on urination	181	69.6
Genital ulcers/sores	111	42.6
Swellings in groin area	100	38.4
Had genital discharge in last 12mths	(n = 260)	
Had genital discharge	29	11.1
Have not had genital discharge	271	88.9
Had genital ulcers/sores in last 12mths	(n = 260)	
Had genital ulcers/sores	25	9.6
Have not had genital ulcers/sores	275	90.4

#### 4.3.7 Knowledge about HIV/AIDS

In table 4.9 below is shown the knowledge of the students on HIV/AIDS. Over ninety percent (95.3%) had heard about HIV/AIDS whilst the rest, 4.7% said they have never heard about HIV/AIDS. Out of those who had heard about HIV/AIDS, 51% knew persons who have had HIV/AIDS and 9.0% had close relatives who have HIV/AIDS. Over eighty percent (83.6%) mentioned abstinence as a means of protecting themselves from HIV/AIDS infection. The use of condom (67.5%) and having an uninfected faithful partner (65.0%) were also indicated as a

means of protection against HIV/AIDS. On the means of transmission of the disease, 96.5%, 89.9%, 84.6% and 76.9% identified having unprotected sex with an infected person, infected mother to unborn baby, use of used needles and through breast feeding respectively. Sharing of meals and bites by mosquito nets were respectively identified by 23.8% and 16.8% of the respondents as means of transmission of HIV/AIDS. Over eighty percent (84.3%) claimed that a healthy person can be infected with the disease. Fifty two percent (52.1%) knew that taking of antiretroviral could prevent mother to child transmission of HIV/AIDS whilst 47.9% did not know how mother to child transmission can be prevented.

**Table 4.9 Knowledge about HIV/AIDS**

<b>Variable</b>	<b>Frequency</b>	<b>Percentage (%)</b>
	<b>(N = 300)</b>	
Heard about HIV/AIDS		
Have heard about HIV/AIDS	286	95.3
Have not heard about HIV/AIDS	14	4.7
Knows someone infected with HIV/AIDS	(n = 286)	
Knows HIV/AIDS patient	146	51.0
Don't know HIV/AIDS patient	140	49.0
Have a close relative with HIV/AIDS	27	9.0
*HIV protection by	(n = 286)	
Use of condom	193	67.5
Having an uninfected faithful partner	186	65.0
Abstaining from sex	239	83.6
Transmission of HIV by:	(n = 286)	
Sharing a meal with HIV patient	68	23.8
Having unprotected sex	276	96.5
Use of used needles	242	84.6
Infected pregnant mother to baby	257	89.9
Breast feeding	220	76.9
Mosquito bites	48	16.8
Healthy person can get infected with HIV	214	84.3

Prevention of mother to child transmission	(n = 286)	
Take antiretroviral	149	52.1
Don't know	137	47.9

#### 4.3.8 HIV testing

Out of the 286 respondents who had heard about HIV/AIDS, 157 representing 54.9% indicated that it is possible to have a confidential HIV test in their community as against 37.1% who did not think it was possible (perception). Eight percent did not know about the possibility of a confidential HIV testing in their communities. About nine percent (9%) of the students had ever had HIV testing. Out of this 30.8% (26) said it was a voluntary test whilst for 69.2% it was a required test. Among those who had ever had HIV test, 73.1% found out about the results but 26.9% did not find out about the results. The HIV test done by the 26 students occurred within a year, and more than four years forming 38.5% and 30.8% respectively.

**Table 4.10 HIV testing among respondents**

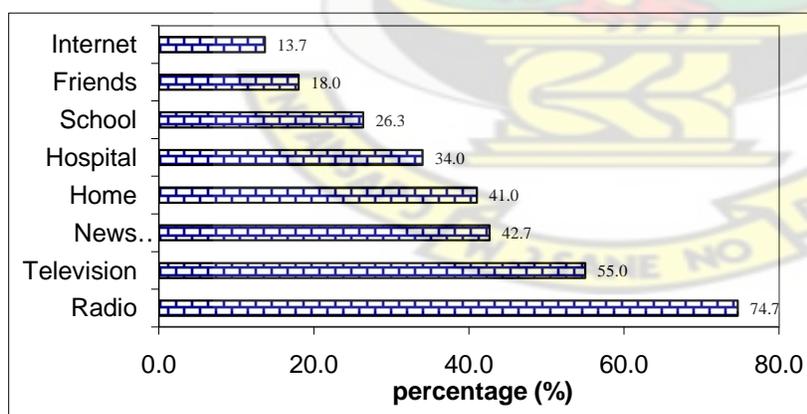
Variable	Frequency (n = 286)	Percentage (%)
Possibility of confidential HIV testing in the community		
Yes	157	54.9
No	106	37.1
Don't know	23	8.0
Ever had HIV test		
Had HIV test	26	9.1
Never had HIV test	260	90.9
Test was:	(n=26)	
Voluntary	8	30.8
Required	18	69.2
Found out the result of the test	(n=26)	

Yes	19	73.1
No	7	26.9
How recent was the test	(n=26)	
Within past year	10	38.5
Between 1 – 2 years	6	23.1
Between 2 – 4 years	2	7.7
More than 4 years	8	30.8

#### 4.3.9 Source of information on reproductive health and HIV/AIDS

The main source of information on reproductive health and HIV/AIDS related issues were radio (74.7%), television (55.50%), papers (42.7%), home (41.0%) and hospital (34.0%) as graphically presented in table 4.3 below. The school was a source of information for 26.3% of the respondents.

**Figure 4.3 Main sources of reproductive health and HIV/AIDS information among respondents (N = 300)**



#### 4.3.10 Frequency of information on HIV

Out of the respondents who had heard about HIV/AIDS, 47.3% heard about HIV in the last four weeks but 22.5% indicated that they did not hear about HIV issues in the same period. The frequency of HIV information received over the last four weeks was once a week (24.5%) and more than once a month (20.6%) as detailed in table 4.12 below. Seven percent of the respondents indicated that they received personnel from ministry of health or AIDS commission about reproductive health and HIV/AIDS information.

**Table 4.11 Frequency of information on HIV received by respondent over the last four weeks.**

Variable	Frequency (n = 286)	Percentage (%)
Obtaining HIV information in last four weeks		
Every day	41	14.3
Once a week	135	47.2
Less than once a week	46	16.0
did not obtain information	64	22.5
Frequency of reproductive health information in the last term		
Once a week	70	24.5
More than once a week	67	23.4
Once every two weeks	23	8.0
Once a month	35	12.2
More than once a month	59	20.6
Don't know	32	11.1
Seminar on reproductive health and HIV/AIDS from MOH or AIDS commission		
Yes	20	7.0
No	266	93.0

#### **4.4 Organisation of reproductive health and HIV/AIDS programmes at JHS**

According to the Metropolitan School Health Programme (SHP) coordinator, *“there is not a strict policy on education of students on reproductive health and HIV/AIDS in GES schools in the metropolis”*. To the best of her knowledge *“there are occasional workshops and talk shows on HIV/AIDS and other reproductive issues with students and teachers and Model schools”*.

Eighteen representatives from the selected schools were interviewed about the nature and organisation of reproductive health and HIV/AIDS information in the school. Thirty nine (38.9%) of the respondents said that they had a teacher in the school responsible for reproductive health education whilst 33.3% said they had three teachers. In the perspective of the respondents, reproductive health education in the school was adequate 55.6%, inadequate 38.9% and cannot tell, 5.6%. Reproductive health education is organised in JHS1 in 11.1% of the schools, in JHS2 in 22.2% of the schools and 38.9% in all forms in the schools. Education on reproductive health done in JHS1 is conducted once a week, 27.8%, more than once a week 11.1% and once every two weeks 11.1% in the schools. In the JHS2, education on reproductive health is give once a week, 27.8% and more than once a week 16.7%. In JHS3, students are given education on reproductive health once a week, 22.2%, more than once a week 11.1%. The respondents did not know how often reproductive education was conducted in JHS1, 27.8%, JHS2, 33.3%, JHS3, 38.9%. Over thirty percent (33.3%) of the respondents indicated that teachings on HIV/AIDS was not done in the last term, however, 11.1% said it was done once a week, more than once a week and once every two weeks correspondingly. The respondents, 27.8% said that MOH staff visited them and gave teachings on HIV/AIDS however for 55.6% of them such visit never occurred in the last term. The challenges perceived by the teachers were lack of appropriate textbooks, 44.4%, lack of other logistics, 44.4% and lack of in-service training on reproductive health and HIV/AIDS, 16.8%. According to the SHP coordinator of the metropolis lack of funds and vehicles prevent them from fully implementing the programmes for the schools and therefore commended Japan International Cooperation Agency (JICA), a non-governmental organisation, for supporting most of their programmes.

**Table 4.12 Organisation of reproductive health and HIV/AIDS education**

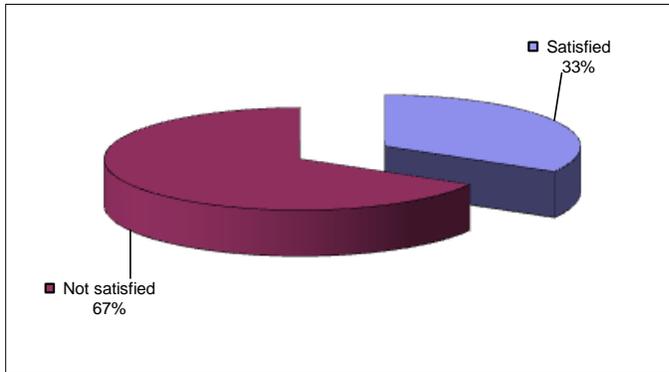
<b>Variable</b>	<b>Frequency (N= 18)</b>	<b>Percentage (%)</b>
<b>Number reproductive health teachers</b>		
One	7	38.9
Two	5	27.8
Three	6	33.3
<b>Reproductive health teachers adequacy</b>		
Adequate	10	55.6
Inadequate	7	38.9
Cannot tell	1	5.6
<b>Forms where reproductive health is taught</b>		
JHS 1	2	11.1
JHS 2	4	22.2
JHS 3	1	5.6
JHS 1 & 2	3	16.7
JHS 2 & 3	1	5.6
All forms	7	38.9
<b>Periods allotted to JHS 1</b>		
Once a week	5	27.8
More than once a week	2	11.1
Once every two weeks	2	11.1
Once a month	4	22.2
Don't know	5	27.8
<b>Periods allotted to JHS 2</b>		
Once a week	4	22.2
More than once a week	3	16.7
Once every two weeks	2	11.1
Once a month	3	16.7
Don't know	6	33.3
<b>Periods allotted to JHS 3</b>		

Once a week	4	22.2
More than once a week	2	11.1
Once every two weeks	2	11.1
Once a month	3	16.7
Don't know	7	38.9
Teaching on HIV/AIDS in the last term		
None	6	33.3
Once a week	2	11.1
More than once a week	2	11.1
Once every two weeks	2	11.1
Once a month	6	33.3
Had MOH staff teach on HIV/AIDS		
Yes	5	27.8
No	10	55.6
Don't know	3	16.7
*Challenges with reproductive and HIV/AIDS issues		
No challenges	2	11.1
Lack of appropriate textbooks	8	44.4
Lack of adequate staff	2	11.1
Lack of other logistics	8	44.4
Lack of in-service training	3	16.7

\* multiple response

**Figure 4.4**

**Satisfaction of teachers on the School Health Education Programme (SHEP)**



KNUST

## CHAPTER FIVE

### DISCUSSION

#### 5.1 Background of respondents

All the students were of adolescent age group and therefore were potentially sexually active. All of them belonged to a religious group – Christians, Moslems and traditionalists – that has in its doctrines issues relating to sexual conducts that are of high moral standing. Christians, Moslems, and traditionalists abhors sexual relations before marriage and therefore teaches and admonishes its followers to observe that accordingly. Unfortunately religious doctrines especially about sexual conducts are difficult to adhere to. Even though most of the students lived with their families, in recent times lack of parental control and supervision of the wards has been a matter of great concern. In their efforts to meet the economic needs of the wards, parents neglect the social responsibility of teaching and guiding their wards on norms and values in their society is neglected. The lack of responsible parenting exposes adolescents to sexual influences from their

friends, media and society. The situation is however worsened when the adolescent is living without their parents. In this study, 5.7% lived alone or with another person who is not a parent. In fact 2.7% of the student lived alone and therefore are responsible for all their needs. The risk associated with meeting such needs would include compromising on moral standing included that related to sex. The challenges accompanying the efforts in meeting these needs as far as sexual exposures are concerned, could lead to sexual abuse, commercial sex practices, drug abuse and alcoholism. These abuses and negative exposures result from the fact that adolescents generally are vulnerable. What could cause JHS students to engage in sex are economic difficulties. Over half (53.3%) of the students had faced financial difficulties leading to absenting themselves from school. This is quiet often among the JHS students and has resulted in some of them engaging in hawking, drawing of water and mechanic work to get additional money to support themselves. The worrying aspect is that what can be considered as genuine income earning activity for some of the students are likely to lead them to be seduced with money into sexual acts that could expose them to HIV and other STDs.

## **5.2 Use of alcohol and hard drugs**

It has been documented that the use of alcohol in excess coupled with use of hard drug including cocaine, heroine and marijuana poses a risk of engaging in unprotected sexual relationship. Indeed, these are sometimes used as baits by others to sedate and abuse innocent girls in the form of rape among others. Some of JHS students in this study were engaged in alcoholism. Over ten percent of them use alcohol quiet often and in addition, 2.3% had exposure to the use of hard drugs including marijuana in the form of smoking. This experience by the JHS students exposes them to the disease and the worrying situation is that, the use of hard drugs and alcohol has started at such a young age, and if not managed could lead to addiction, that is if some of them are not addicted already.

## **5.3 Sexual experience**

Engaging in early sex among adolescents can be said to be dangerous considering the fact that such exposures are not guided by pre-knowledge of safe sex practices. Even though nine percent

of the student had ever had sex, this percentage could be said to be high. Most of the student who had ever had sex had it when they were less than 10 years. It must be mentioned however, that as the student approach the age of 18, the proportion of those who have the first sex exposure increase. This suggests a response to a normal adolescent development stage that includes sexual desires and drives. The missed opportunity in overcoming such response is an early enculturation of the adolescents at an early stage. The lack of pre-protective knowledge about sex, might have accounted for the high percentage, 63% of them not using a condom in their first sexual exposure. All these young persons, might expose themselves to STDs and HIV/AIDS. This more buttressed by the fact that their encounters was with persons usually 5 – 10 years older than them who might have had several of unprotected sexual encounters with other persons. The susceptibility to STDs and HIV/AIDS is even worse the more when over 44% of those who were sexually active did not know the ages of the first-sex partner. It presumes that they hardly knew about themselves, their previous sexual relationship, possible risk exposures and hence could be said that the first experiences might have occurred in an unplanned and a rash manner.

Most of the students who have ever had sex, continue to have sex and in some instance with 'commercial sex partners'. 'Commercial sex partners' are considered to be risk group in STDs and HIV/AIDS transmission and persons who have sexual intercourse with them stand a higher chance of contracting such diseases. It is observed in this study that encounters with 'commercial sex partners' usually goes with the use of condom and hence could be said to be protected sex to some extent. Comparatively, sex with 'non-commercial sex workers' could be said to be more risky. This is because majority of sexual intercourse with 'non-commercial sex partners' by the students were not protected – use of condoms. They student might have perceived sexual relations with the 'non-commercial sex partners' as safe because their partners were not known to be engaged in having multiple partners. 'Non-commercial sex partners' may be engaged in commercial sex work but in secret unlike commercial sex workers and more so when relationship with non-commercial workers is not consummated, everyone is at liberty to explore the sexual desires to any extent. It is therefore obvious that sexual relations engaged by the students irrespective of the type of sex partner could be risky.

This study has shown that there are demonstrable risky sexual behaviours among JHS students which include, having multiple sex partners, engaging in un-protective sex and more

surprisingly, engaging in homosexual intercourse (a male to male sexual relationship). This practice is reflected in 14.7% of the JHS students who had sex within the last 12 months.

#### **5.4 Knowledge and experience about male condoms**

Male condom has been with us over decades. There have been a lot of education through the print and electronic media on the awareness and use of condoms in general and mostly male condoms. It is therefore a shocking revelation that 24.7% of the JHS students indicated that they have never heard about male condom. This may be attributed to late introduction of sexual education among young people as pertained in some homes. There has been evidence of difficulty in engaging in sexual conversation with wards by parents. And even in most educational institutions this is sparingly done. Those who have never heard about male condom cannot even think about it as a means of preventing STDs and HIV/AIDS if they are to have sex. It is not enough to be aware of the existence of male condom, but importantly, where it can be assessed. Knowing where it is sold would provide reinforcement from awareness level to usage. It is perceived that adolescents are shy in accessing condoms in general because they may be defined as “bad kids”. Such perception might have influenced the observation that even among those who are aware a high percentage, 15.1% did not know where to access it. The Ghana AIDS Commission, MOH, and NGOs have worked over the years and have advocated and encouraged the sale of male condoms in almost every place. The most common places identified were pharmacy, family planning clinics, and hospitals. These sources may provide not only quality condoms for use, but also give quality information regarding the correct use of the male condoms. Other sources including bars, hotels, and shops are known by the students. Time in accessing male condoms from the varying sources is vital essential in influencing use and also adherence. Majority of them could access the places that condoms are sold or distributed within less than an hour. This presupposes that even though some of the JHS claimed they had not ever had sex, they knew that condom is available for use and could be access early enough if needed.

#### **5.5 Knowledge and incidence of STDs**

Even though nine out of ten JHS students have heard about STDs, those who have not heard about STDs are of great concern. Lack of awareness about STDs could contribute to susceptibility to its transmission. Students in JHS are vulnerable in most respects and the lack of knowledge about STDs makes them more vulnerable since they cannot exhibit caution when faced with situations such as sexual enticement.

The students were well aware of the various signs and symptoms exhibited in both men and women who have STDs. The extensive knowledge exhibited by the student on the symptoms of STDs is commendable as it is a positive step towards early reporting and management of such disease when it occurred. Painful urination and ulceration around the genitalia are key indicators of possible STDs. The occurrence of such symptoms such as genital discharge and genital ulcers or sores prevails amongst the students. In fact, 11.1% and 9.6% of the students had genital discharge and genital ulcers respectively.

On HIV/AIDs, most of the students had heard about the condition, however 4.7% indicated that they have not heard it. Considering that information on HIV/AIDS has been extensively propagated over the years, it is disappointing that such a high percentage of students still have not heard about the condition. The main sources of information were radio, television and newspapers. Radio and television in particular covers a wider area in the Kumasi Metropolis. The several radio stations propagate varied information on sexual life, STDs and HIV/AIDS. Unfortunately these media also provide negative information about sex and sex life including supposed education on sexual intercourse among couples which is believed to have negative influence on our youth especially those in JHS. The influence is worsened in such situation as when most of these students in this study do not live with their parents and even if they did they lack the requisite supervision as to what to listen or watch and what not to listen or watch in the media.

Among adolescents, due to their adventurous nature, it is expedient that in the process of building the attitude and behaviour towards a sensitive issue like sex, STDs and HIV/AIDS, they experience the realities as in knowing exactly how these concepts exhibit physically. Majority of the JHS students who have heard about HIV/AIDS knew someone with the infection, however about half had never seen an HIV/AIDS patient before. Providing the students an opportunity to

witness the manifestation of the disease naturally in persons who have the disease would be a good stimulus for maintaining and enculturation of their knowledge about the disease. It could also help them to be resolved on safer sex behaviours so as not to be infected. The students knew about means of protecting oneself from HIV including the use of condom, having an uninfected faithful partner and abstinence. Abstinence seemed to be the highest on the rank of choice of means of protection against HIV/AIDS; however, adherence to it is a complex matter. Even though the students knew about means of transmission of the disease, there were several misconceptions about the methods of transmission. Students still perceive that sharing of meals with HIV patients and transmission through mosquito bite are possibilities. These misconceptions may fuel the stigmatisation of HIV/AIDS patients which has become a great challenge for all. It is believed that the lack of support and neglect of family members infected with HIV/AIDS contribute immensely to the early death and desperations sometimes resulting in suicidal tendencies.

HIV testing is being encouraged over the years to help identify and assist in helping the infected to maintain an active life. The concerns about this test have been related to its implication relative to its secrecy and also associated stigmatisation. Unfortunately some 37.1% of the students think that confidential HIV testing is not possible. The implication is that lack of knowledge about the availability of voluntary counselling and testing for HIV could be a barrier in assisting persons who have had sexual risk exposures to HIV such as pertains amongst the students. Some of the students have sex without the use of condoms. Only nine percent of the students had had HIV testing but for most of them it was not a voluntary test yet they went for the results. Others also did not want to know the results for obvious reasons. Low awareness and utilisation of HIV testing services among the students deserve attention.

### **5.6 Organisation of reproductive and HIV/AIDS programmes in the schools**

All the schools had teachers responsible for reproductive health education programmes though not into details. However, some of them think that the number of teachers responsible for the subject matter is not adequate. Adequacy requires further examination considering the nature, form, load and extent of monitoring and supervision of work given to such teachers. In most of the schools reproductive and HIV/AIDS education is conducted in all the forms, however,

isolated forms are selected especially JHS 1 and JHS 2 for reproductive education. Even though education on reproductive health in the class in the schools occurred variedly in terms of frequency, it is viewed that its occurrence is sparingly. As one teacher puts it, in the curriculum designed to capture issues related to HIV/AIDS the subject is handled in an instruction session over the whole term. This is woefully inadequate since such subjects which would require imbibing taught behaviour into practices deserves a series of reinforcements to stick with the students. As elaborated by the SHEP coordinator and buttressed by students and teachers, there is little support provided by facilitators from the AIDS commission and MOH. Personnel from these organisations who have been mandated to assist in the dissemination of HIV/AIDS information and update on the subject rarely visit schools. The lack of logistics and vehicle could be a major hindrance in not achieving this objective of educating and updating students' knowledge on reproductive health and HIV/AIDS. It is imperative that innovative preventive measures are instituted and enhanced in the face of these constraints. This is because international funding is limited as the World Bank admits that HIV/AIDS receives less than half the funding needed to meet the commitment to universal access to prevention and treatment (World Bank, 2007-2011).



## CHAPTER SIX

### CONCLUSION AND RECOMMENDATION

#### 6.1 CONCLUSION

- Students from JHS engage in sexual intercourse (9%) and sometimes even below the age of 10 years (1.7%) with person 5 years and above (18.5%) older than them.
- Over sixty percent (63%) of JHS students who are sexually active have sex without using condoms and this makes them at greater risk of contracting HIV/AIDS.
- Over twenty percent (28.6%) of JHS students who had sex in the last 12 months engaged with commercial sex workers. Homosexual intercourse also exists among JHS students in the Kumasi Metropolis.
- A high percentage (24.7%) of JHS student have never heard about Male condoms and 15.1% of those who knew it did not know where to get male condoms.
- About five percent of the JHS students in the Kumasi Metropolis have not heard about HIV/AIDS. JHS student hold misconceptions about HIV transmission including the sharing of food with HIV patient (23.8%) and through mosquito bites (16.8%).
- About fifty percent 45.1% of JHS student in Kumasi Metropolis are not aware of confidential HIV testing in their communities. The few (9.1%) who had had HIV testing did it not on voluntary bases (69.2%) hence refuse to go for the results due to stigma.
- The organisation of reproductive health and HIV/AIDS education in the schools is done irregularly and on limited basis. Staff from MOH and AIDS commission rarely provides support in educating JHS students on reproductive health and HIV/AIDS issues. The main cause of low satisfaction of the SHEP programme which includes that related to reproductive health and HIV/AIDS education is lack of funds, vehicles and logistics.

## 6.2 RECOMMENDATIONS

As a result of my study results and conclusions, the following recommendations are made:

1. The GES should intensify efforts at improving the capacity of Junior High Schools to educate its students on reproductive health and HIV/AIDS through the provision of logistics and materials such as books, posters, pamphlets and also seminars to update the knowledge of teachers, coordinators on such topics.
2. The Ministry of Health should provide regular support in assisting Junior High Schools to educate its students about HIV/AIDS and reproductive health issues.
3. Teachers in Junior High Schools should ensure that basic information about STDs and HIV/AIDS such as mode of transmission is known by all the students through consistent organisation of periodic seminars and workshops.
4. Teachers, Health workers and the Media should assist in educating JHS students that eating with persons with HIV infection cannot transmit the disease neither do mosquito bites. They should continue to create awareness about HIV/AIDS and STDS since some of their students still have not even heard of such diseases.
5. The Metropolitan Assembly in collaboration with the Assemblymen should work closely in providing community interventions that would ensure that adolescents between 10 – 18 years are protected from alcohol and drug use. This could be monitored and coordinated by the Metropolitan Security Council and the Ghana Police Service.
6. Highly professionally trained counsellors should be permanently engaged in schools to give counselling and guidance on sexual and reproductive health to adolescents. Agencies and other NGOs could play collaborative role.

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