SEX EDUCATION AND ADOLESCENTS SEXUAL BEHAVIOUR OF SELECTED SENIOR HIGH SCHOOLS IN THE KUMASI METROPOLIS

BY

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DECLARATION

I, Robert Kuchengye Mokulogo, hereby declare that this thesis, "Sex education and adolescents sexual behaviour of selected senior high schools in the Kumasi Metropolis", consists entirely of my own work produced from research undertaken under supervision and that no part of it has been published or presented for another degree elsewhere, except for the permissible citations/references from other sources, which have been duly acknowledged.

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DEDICATION

Special dedications go to my loving wife (Juliette Yaa Adogkima) and children (Godwin Akwowora, Bertha Kumang and Dorinda Awelana) for their support in my academic pursuits.

To my late Mum Kunidebam Acheleye, for all the love and support I enjoyed from you, I dedicate this piece to you in the form of thank you.

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ABSTRACT

Context: Sex-related consequences: unintended pregnancy, sexually transmitted infections and unsafe abortions are serious problems that young people especially in-school adolescents are confronted with. To promote healthy sexual life and protect them, sex education becomes imperative to equip them with knowledge and skills .While there is limited data available on how in-school adolescents protect themselves from sex-related risks, there is enough evidence which indicates that in-school adolescents are confronted with unwanted pregnancies, sexually transmitted infections and unsafe abortions which in turn lead to maternal deaths.

Methods: Data were collected in 2012 from: 326 student respondents in six selected public and private SHS in the Kumasi Metropolis of Ghana, 19 key adults (parents, health professionals and teachers) and 3 FGDs (Boys only, Girls only and Boys and Girls). Descriptive statistics (frequency tables) were used to describe the kinds of school-based sex education programmes, sources of sex-related information and adolescents' sexual behaviour including suggested ways to improve sex education as well as the views and perceptions from the key adults. Multiple regression techniques identified relationships between sex education and sexual behaviour on one hand and associations between sex-related information and sexual behaviour on the other hand.

Results: The study identified three kinds of school-based sex education: abstinence, sex resistance skills and contraceptive-based education. Peers or friends and internet were the main sources of sex-related information for the in-school adolescents. The study further found that 50.3% of the in-school adolescents were sexually active and that early sex initiation, unprotected sex and having multiple sexual partners were common phenomena among sexually active students. Sexual behaviours such as contraceptive use and number of lifetime sexual partners

were positively associated with contraceptive-based sex education (beta=.811 and beta=.89) respectively. Age of first sexual encounter was also found to be positively associated with abstinence from sex (beta=.69). However, age of first sexual encounter, contraceptive use and number of lifetime sexual partners were not significantly related to sex resistance skills. Sexual behaviours like age of first sexual encounter and number of lifetime sexual partners were moderately associated with interpersonal and media sources of sex-related information (beta=.600 and .57) respectively whereas contraceptive use (beta= -.096) and number of lifetime sexual partners (beta= -.014) were negatively associated with interpersonal sources of sex-related information. In terms of ways of to improve sex education, it was found that sex education should be in the form of advice and discussion and this should start during early adolescence (11-14years) preferably by parents.

Conclusion: Abstinence from sex and contraceptive-based sex education could be effective tools in protecting adolescents from sex-related consequences such as unintended pregnancy, sexually transmitted infections and unsafe abortions. Both interpersonal and media sources of sex-related information could be contributing factors as well as threatening factors to the promotion of healthy sexual life among young people. Sexual activity and having multiple sexual partners were common phenomena among sexually active in-school adolescents but a gradual change in behaviour in relation to contraceptive use for protection was observed. Programmes and educational activities which aim to promote healthy sexual life and protect the next generation should actively involve the in-school adolescents and the key adults (parents, teachers and health professionals).

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CHAPTER ONE

INTRODUCTION

1.0 Introduction and Background to the Study

From the functionalist perspective, society is viewed as a system which relates to a set of interconnected and interdependent parts which together form a whole (Haralambos and Holborn, 2004). This implies that each interdependent part must contribute or work together with the others to form and maintain the social system. It could be inferred that adolescents constitute one of the major interdependent units of the human race and play a very important role in relation with the others to maintain the system (human race) as a whole. Thus, the welfare of young people has become a major focus for policymakers, service providers, religious bodies and parents in particular and society in general (Sabia, 2006).

This is probably because there is the need to prevent them from social vices such as the Human Immunodeficiency Virus (HIV/AIDS), sexually transmitted infections (STIs) and unintended pregnancies. Research has shown that one third of the total disease burden in adults is associated with conditions or behaviours that began in their youthful stage (Brown, Jejeebhoy, Shah & Yount, 2001). These behaviours include: early sexual initiation, unprotected sexual intercourse and sex with multiple partners (Kapungu, Donna, Holmbeck, Mcbride, Robinson-Brown, Sturdivant, Crown & Roberta, 2010). Most countries such as Benin, Togo, Nigeria including Ghana are aware of the challenges that the youth (adolescents in particular) face in relation to their reproductive health (UNICEF, 2006). This may therefore explain why they are signatories to the United Nations Convention on the Rights of the Child. Article 17 of the Convention on

the rights of the Child (CRC) states that "Parties recognize the important function performed by the mass media and shall ensure that the child has access to information and material from a diversity of national and international sources, especially those aimed at the promotion of his or her social, spiritual and moral well-being and physical and mental health". Do the children actually have access to this information in Ghana, for that matter in the Kumasi Metropolis?

Article 24 further states that "Parties recognize the right of the child to the enjoyment of the highest attainable standard of health and to facilities for the treatment of illness and rehabilitation of health. States Parties shall strive to ensure that no child is deprived of his or her right of access to such health care services". Based on these two articles, the question is, do parents actually involve children in such decisions? Again, does the in-school adolescent in Kumasi have access to this crucial and life saving information?

In order to ensure healthy reproductive life, everybody has the right to quality, correct and appropriate information concerning his/her sexuality. With an increasing spread of HIV/AIDS and other sexually transmitted infections, the situation is very challenging and worrisome.

It has been established that one in every five people in the world is an adolescent and 85 percent of them live in developing countries (Brown et al., 2001). Ghana is not an exception to this, as the 2008 Ghana Demographic Health Survey (GDHS), indicates that the population is relatively young about 33 percent. Again, adolescents are growing up in circumstances quite different from those of their parents, with greater access to formal education, increasing need for such technological skills as computer and internet literacy, different job opportunities and more exposure to new ideas through media, telecommunications and other avenues (UNFPA, 2008 as cited in Hindin & Fatusi, 2009)

The environment in which young people are making decisions related to sexual and reproductive health is also rapidly evolving (Ali & Cleland, 2005; Gupta & Mahya, 2003 as cited in Hindin & Fatusi, 2009). The social and technological environments have the propensity of exposing adolescents to early sexual adventures which can place young people at risk of pregnancy and sexually transmitted infections (STIs), including the human immunodeficiency Virus (HIV/AIDS) (Brown et al, 2001).

Consequently, a lot of efforts in the form of policies and programmes such as sex education, contraception and youth friendly health services are rolled out by governments, healthcare providers and professionals, policymakers and parents in countries like India, Philippines, Vietnam, Indonesia, Peru and Turkey with the aim of protecting the adolescents from the risks associated with irresponsible sexual behaviour (Lylod, 2007).

In the developed countries like the USA, school- based sex education is vigorously pursued in order to give adolescents the right information at the right time to guide them in their sexual behaviour (The American Academy of Pediatrics, 2010).

Similarly, in Sub-Saharan Africa, sex education which was mostly carried out by some particular group of people in the community during puberty rites for girls has gone further to include other agents of socialization such as the school, the mass media, the religious bodies and the health care providers (Bankole, Briddlecom, Guiella, Singh & Zulu, 2007).

According to Braeken, Shand & Upeka de Silva, (2010) the emotional, social and health needs of young people are currently not being fully met. The Researchers established that every year, at least 111 million new cases of curable sexually transmitted infections (STIs) and half of all new

HIV infections occur among young people and up to 4.4 million girls aged 15–19 seek abortion – the majority of which are unsafe. They further stated that ten per cent (10%) of births worldwide are to adolescent mothers, who experience much higher rates of maternal mortality than older women (ibid). This means that sexual behaviour can be an important determinant of basic health, both during adolescence and later in adulthood hence interventions in the form of sex education to control sexual behaviour of the adolescents do not only become imperative but also a human right issue especially in settings where HIV/AIDS is widespread (Lylod, 2007).

Adolescence is a unique situation because it marks the stage of identity formation and if the adolescents in this stage are not properly guided especially in their sexual and reproductive lives; most of the adolescents stand high risks of social and health problems. It is against this background that, the study intends to examine the role society can play in providing sex education to help direct the sexual behaviour of adolescents.

1.1 Problem Statement

Currently, there are national policies and programmes that seek to protect the well-being of adolescents in general and their reproductive health in particular. The policies and programmes include:, the 2000 Adolescent Reproductive Health Policy, the 2001 National HIV/AIDS and STIs policy, Family Planning Services and Family Life education in Primary and Senior High Schools. Thus, the overall aim of the policies and programmes is to promote healthy sexual life (provision of sex education).

For instance, the Adolescent Reproductive Health Policy was published in 2000 by the Government of Ghana. The broad objective of this policy is to promote healthy environment and policy framework within which young people can obtain information and services on

reproductive health and exercise their reproductive rights (GOG, 2000). There are two specific targets which are of interest here ; to motivate young people to increase the age of the onset of sexual activity, which was around 12 years to older than 15 years by 2010 and to reduce the incidence of STIs, including HIV/AIDS, among 15-24-years-olds by 50% by 2010 (GOG, 2000). However, according to Seigh (2010), many abortions in Ghana are obtained by young women and women in urban areas (25% for 20-24years and 17% for 15-19 years. This implies that the adolescents aged between, 15-19 engage in unprotected sex resulting in unintended pregnancy and abortion which is mostly unsafe.

Furthermore, whereas in recent years, the national statistics on maternal mortality ratio (MMR) declined from 560 deaths out of 100,000 live births in 2005, to 451 deaths in 2007 (WHO, 2005; Ghana DHS, 2007 as cited in Pehr, Akuamoa-Boateng & MCI, 2010) statistics from Kumasi show that maternal deaths then began rising. For instance, in 2007, MMR was 359 out of 100,000, while in 2008 it was 397 out of 100,000 (KMHD, 2009 as in Pehr et al., 2010). Unsafe abortion and inadequate facilities were some of the factors contributing to the high MMR in Kumasi (Pehr et al., 2010). These findings presuppose that there is fundamentally something wrong with the social environments in which socialization including the provision of sex education takes place. Thus, these social environments are defective. Can the increase in maternal deaths be associated with unwanted pregnancies mostly characterized by unsafe abortions? Moreover, about fifty percent (45.1%) of JHS adolescent in the Kumasi Metropolis are not aware of confidential HIV testing in their communities (Adjaloo, 2011). Can this problem be traced to lack of reproductive health and sex education in the schools including the Senior High Schools within the Metropolis?

In response to the HIV/AIDS epidemic, the Government of Ghana produced the National HIV/AIDS and STIs Policy in 2001 to guide programmes and activities .The policy established the Ghana AIDS Commission, charged with the responsibility of coordinating all activities on HIV/AIDS in the country. One of the functions of the Commission in dealing with young persons or the youth of Ghana, is to mobilize parents, policymakers, media and religious organizations to influence public opinion and policies with regard to HIV/AIDS and STIs and young people, such as improving quality and coverage of in-school and out-of-school programmes (GOG, 2001). Furthermore, it is to ensure the expansion of the access of young people to youth-friendly facilities and services including HIV and STI prevention, management and testing, counseling and the provision of care and support services (Ibid).

A recent study in the Kumasi Metropolis among Junior High Students revealed that about forty-five percent (45.1%) are unaware of confidential HIV testing and over sixty percent (63%) who are sexually active engage in unprotected sex (Adjaloo, 2011). The question is, how effective have these programmes been implemented in the schools within the Kumasi metropolis? Meanwhile, health professionals in almost all the public health institutions have been trained to offer services to adolescents and organise adolescent reproductive health activities which take place both at the hospital and outside the hospital. These services include the prevention of teenage pregnancies, STIs and HIV/AIDS (KMA, 2006). The question one may ask is what accounts for these risky sexual behaviours within the metropolis? And who is to be blamed for the negative sexual behaviours? Is the situation in the Senior High Schools in the Metropolis different?

Until 1994, family planning services did not include young people in Ghana, it was meant for only married couples (Awusabo-Asare, Abane, & Kumi-Kyereme, 2004). When the Planned

Parenthood Association of Ghana was established in 1967, it also excluded young people in the provision of family planning services until 1994 when the Population Policy was revised (ibid). With the outbreak of HIV/AIDS, Family Planning Services explicitly took into account the needs of young people's reproductive health in government hospitals; government health centers family planning clinics, mobile clinics and fieldworkers and the private clinics and drugstores (Ghana statistical service, 1998 as cited in Awusabo, 2004). It was further evident that the media campaigns were also providing specific services such as counseling in both formal and informal settings which was initially targeting the general population but later developed around the "ABC" concepts of Abstinence, Being faithful to one partner (monogamy) and Condom use with emphasis on abstinence for young people. However, Reshma & Brady, (2008) reported that there are unmet needs of family planning services in Ghana. Pehr et al., (2010) confirmed that there is a declined use of family planning services in Kumasi.

For instance, in 2007 10% of women of fertility age were enrolled in family planning services and using contraception, Kumasi Metropolitan Health Directorate (KMHD, 2008 as in Pehr et al., 2010). The 10% in 2007 decreased to 7.2 % (KMHD, 2009 as in Pehr et al., 2010). The study further found that there were no reports of emergency contraception usage in Kumasi and most people in Kumasi are unaware of emergency contraception (ibid). A study by Adjaloo (2011) among Junior High Students within the Metropolis also indicated that about forty-five percent (45.1%) and over sixty percent (63%) of the adolescents are unaware of confidential HIV testing and engage in unprotected sex respectively.

The question one may ask is, are the adolescents in the Senior High Schools unaware of the emergency contraception and confidential HIV testing? Can this lack of awareness be associated with lack of reproductive health and sex education in the schools?

Having realized that schools are the potential avenues for information dissemination, sexual and reproductive health has been introduced into the social science syllabi of primary and secondary institutions in Ghana (Awusabo, 2004). Students are expected to be introduced to basics of Family Life Education and in order to respond to the need for qualified teachers for the Family Life Education within the school system, the University of Cape Coast started a degree program in population and family life in 1996 (Ibid). The broad aim of this school-based programme is to provide students with sex education in order to promote healthy sexual life but recent research shows that pre-marital sex, teenage pregnancy and abortions are on the ascendency. For example, a study by Sundaram, Juarez, Bankole & Susheela, (2011) found that 85 percent of first abortions are due to pre-marital sex and 60 percent of those who ever had an abortion were living in an urban area. The question is do adolescents in second cycle institutions in Kumasi engage in pre-marital sex?

The study further stated that at least 7 percent of all pregnancies in Ghana end in abortion, and 15 percent of women aged 15–49 admitted to having had an abortion and abortion rates were highest among 20–24-year-olds, educated and wealthier women and those living in urban areas (ibid). According to Adjaloo (2011) some Junior High Students (JHS) (9%) engage in early sexual activity below the age of ten years and over sixty percent (63%) engage in premarital and unprotected sexual intercourse. The question one may ask is whether or not this is the case

among adolescents in Senior High Schools in Kumasi? What will be the effects of these sexual behaviours on the victims and the society at large?

It is in the light of the a bove problems and some others that the study is set to examine the effects of sex education on adolescents' sexual behaviour.

1.2 Leading Research Questions

The leading research questions which give direction to the study are:

1. What kinds of sex educational programmes are available to adolescents in Senior High Schools?
2. What are the sources of sex-related information for the adolescents in Senior High Schools?
3. What are the effects of the sex educational programmes on the adolescents' sexual beaviour?

1.3 Objectives of the Study

The main objective of the study is to examine the effects of the sex education on adolescents' sexual behaviour in selected schools in the Kumasi Metropolis.

Specifically, the study intends to:

1. Discover the kinds of sex educational programmes that are available to adolescents in Senior High Schools.
2. Find out the sources of sex-related information for the adolescents in Senior High Schools.
3. Examine the effects of the sex educational programmes on the adolescents' sexual behaviour.

4. To make some recommendations for future policy formulation and implementation by stakeholders in reproductive health

1.4 Hypotheses

Hypothesis I

Ho: In-school adolescents' sexual behaviour and availability of sex educational programmes to them are independent.

H1: Sexual behaviour of in-school adolescents is dependent on the availability of sex educational programmes to them.

Hypothesis II

Ho: Sexual behaviour of in-school adolescents and their sources of sex-related information are not related.

HI: Sexual behaviour of in-school adolescents is a function of their sources of sex information.

1.5 Justification for the Study

The study is considered both important and timely for a number of reasons. First, it is acknowledged that adolescent reproductive health issues such as teenage pregnancy, unsafe abortions and high rates of sexually transmitted infections are challenges in Ghana and in the Kumasi Metropolis (KMA, 2006; Ministry of Youth and Sport, 2010 & Sundaram et al., 2011). For instance, in the Kumasi Metropolis, a study by Adjaloo (2011) on "*HIV*- Risk-Reduction Measures among adolescents in Junior High Schools in the Kumasi Metropolis" revealed the following: about forty-five percent (45.1%) of JHS students are not aware of confidential HIV testing in their communities, the organization of reproductive and HIV education in the public basic schools within the metropolis is done irregularly and on limited basis. Additionally, staff of Ministry of Health (MOH) and AIDS Commission rarely provides support in educating JHS students on reproductive health and HIV/AIDS issues. It is worth noting that Adjaloo's study was limited to the adolescents of basic public schools within the metropolis. This present study therefore fills the gap by investigating the effects of sex education on adolescents' sexual behaviour at the second cycle level. Furthermore, this study also includes private Senior High Schools (SHS) within the metropolis since the basic schools (both private and public) feed the Senior High Schools with students.

Another study in the metropolis revealed that there were no reports of emergency contraception usage in Kumasi and most people in Kumasi are unaware of emergency contraception (Pehr et al., 2010). This present study which aims at examining the effects of sex education on adole scent's sexual behaviour will find out whether adolescents from Senior High School are in anyway affected by these unmet family planning needs or service within the metropolis.

Recommendations would thus be made with regards to preventing the possible occurrence of teenage pregnancy or unwanted pregnancy and STIs.

1.6 Significance of the Study

The findings of the study will provide critical information on the most effective and dynamic ways of providing sex education to the Ghanaian adolescents. This could be made possible through radio and TV discussions and the print media.

The findings of the study will add to the existing knowledge on sex education and adolescents' sexual behaviour in Ghana. Thus, future researchers would have the opportunity to review it in addition to the several others already in existence for information and direction to their studies.

Also, the findings of the study will be useful to school authorities especially the Senior High Schools in Ghana to provide counselling and age-appropriate life planning skills education to in-school adolescents.

Furthermore, the study would enable policymakers such as Central Government, the Ghana Education Service, District, Municipal and Metropolitan Assemblies to fashion out appropriate interventions in the field of sex education for the youth in the country.

Additionally, Non-governmental Organisations and agencies such as the Planned Parenthood Association of Ghana, the National Youth Council, the National Commission on Children and the National Population Council may also find the findings of the study very useful in their operations in the country.

Finally, international bodies like the United Nations Children's Fund (UNICEF) and other developmental partners and all those who are interested in adolescents' reproductive health can make use of the findings of the study.

1.7 Conceptual Definitions.

Possible Sex Educators: This refers to the various agents of socialization and social environments such as the parents, peers, the religious bodies, health professionals and the school in which an adolescent could be socialized including sex education to promote healthy sexual life.

Sex Educational programmes: In this study, sex educational programmes refer to strategies designed to provide accurate and right information to adolescents, to encourage them to use contraceptives when sexually active, develop communication and negotiating skills to resist from sexual activity and discourage them from early sexual initiation with the aim of promoting healthy sexual life.

In-School Adolescents: The National Population Council (2000) defined" in-school adolescents in the National Reproductive Health Policy 2000, as adolescents and young people in primary, junior and senior secondary schools, training institutions/colleges and tertiary institutions. The school, as a socializing agent, provides an avenue for learning of new skills and the acquisition of values, including those on sexual and reproductive health. Students at all levels of the school system constitute a captive audience who can easily be reached with information and services"

But for the purpose of this study, adolescents or young people refer to a young person that is both male and female between the ages of 14 and 19 and is currently enrolled in any of the Senior High Schools (both private and public) as a student in Ghana.

Negative Sexual Behaviours: These are sexual behaviours such as having multiple sex partners, engaging in unprotected sex and early sexual initiation that expose the adolescents to dangers such as sexually transmitted infections, unintended pregnancies which may in turn lead to unsafe abortions and probably maternal deaths.

Positive Sexual Behaviours: These are sexual behaviours such as delayed sexual initiation, having a faithful and single sex partner and engaging in protected sex that do not expose the adolescents to dangers such as sexually transmitted infections, unintended pregnancies which may lead to unsafe abortions and maternal deaths eventually.

Social benefits: In this study, social benefits refer to a set of positive outcomes such as reduced teenage pregnancy, decreased unsafe abortions and reduced sexually transmitted infections emanating from the sex educational programmes executed by the various possible sex educators.

Social problems: In this study, social problems refer to a set of negative effects such as teenage pregnancy, high incidence of unsafe abortions and high rates of sexually transmitted infections emanating from the sex educational programmes executed by the possible sex educators.

1.8 Scope of the Study

This involved a description of the setting of the study and the aspects that the study focused on relative to the broader perspective of adolescents' sexual and reproductive health. The scope therefore comprised the contextual and geographical aspects of the study.

1.8.1 Contextual Scope

According to WHO, (2004) the components of reproductive health include meeting the need for family planning, ensuring maternal health and reducing infant mortality, preventing and treating

STIs including HIV/AIDS and eliminating traditional practices such as Female Genital Mutilation (FGM) that are harmful to women's reproductive health and well-being. This implies that reproductive health is a vast domain. As a result, this study focused on an aspect of reproductive health that is sex education and adolescent's sexual behaviour of selected schools within the Kumasi Metropolis. This is because young people are great assets to a nation hence they are the future leaders for that matter they have to be protected and guided in all aspects of their lives more especially their sexual and reproductive health.

It has been established that sexual behaviour can be an important determinant of basic health, both during adolescence and later in adulthood hence interventions in the form of sex education to control sexual behaviour of the adolescents do not only become imperative but also a human right issue especially in settings where HIV/AIDS is widespread (Lylod, 2007).

1.8. 2 Geographical Scope of the Study Area

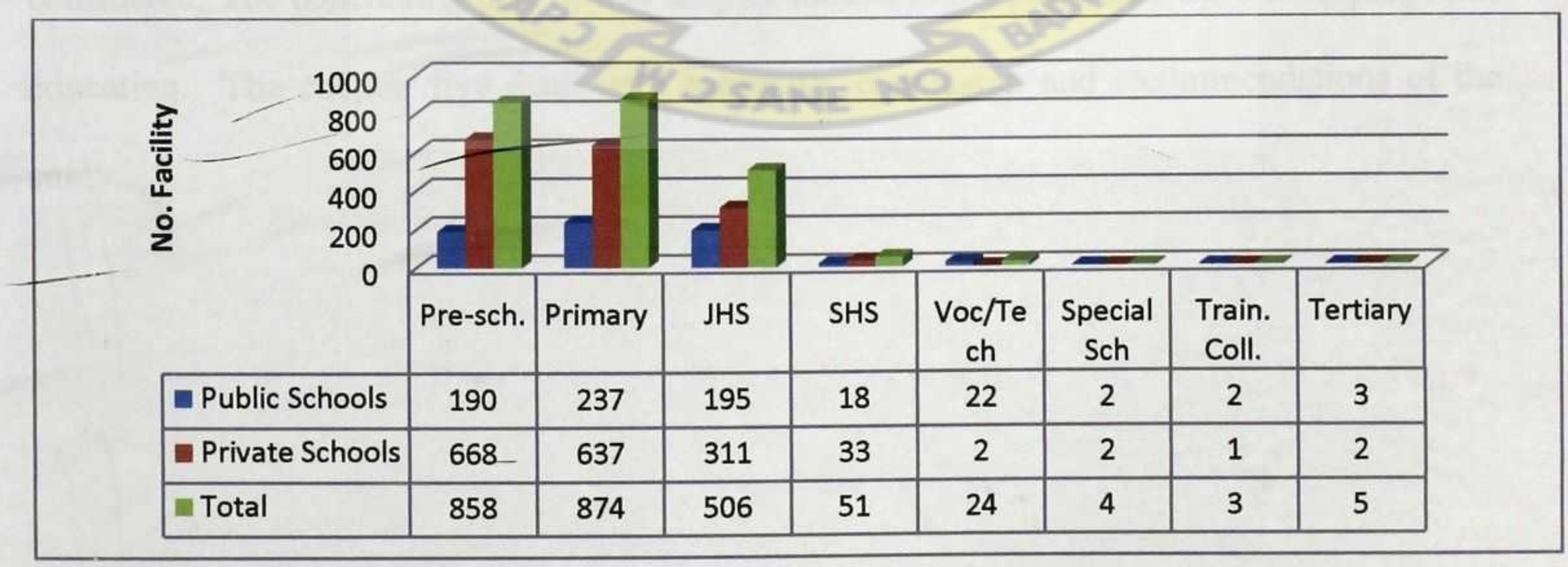
This study focused on adolescents of selected Senior Highs Schools within the Kumasi Metropolis. Kumasi is the regional capital of Ashanti region located in the forest zone, about 270km north of the national capital, Accra. Kumasi is bounded to the north by Kwabre District, to the east by Ejisu Juabeng District, to the west by Atwima Nwabiagya District and to the south by Bosomtwe-Atwima Kwanwoma District (KMA, 2011).

The educational system in Kumasi comprises Basic Schools, Senior High Schools (SHS), Vocational and Technical Schools, Colleges of Education and Tertiary Institutions. The basic school consists of Pre-School, Primary School and Junior High School (JHS). The Metropolis has a total of 2,325 educational facilities supporting the provision of education within the

Metropolis. The basic school occupies most of these facilities. It is also important to note the significant role played by the private sector in ensuring quality and easy access to education in Kumasi. Again, the private sector is doing more than the government in terms of the number of Junior and Senior High Schools within the Metropolis.

However, in terms of vocational/Technical, College of Education and Tertiary facilities the government is far ahead of the private sector. With Special Education facilities both government and the private sector have equal number of schools. This active involvement of players in the private sector in the provision of educational services has been attributed to the enabling environment created through the combined efforts of Kumasi Metropolitan Assembly (KMA) and other relevant public institutions within the Metropolis (KMA, 2011).

From Figure 1.2, it is realized there are about fifty one (51) Senior High Schools in Kumasi Metropolis, eighteen public schools and thirty three private schools. However, due to time and financial constraints, this study cannot cover the whole population hence four (4) public schools and two (2) private schools have been chosen for the study. A much detailed discussion on the selection of the schools and the respondents can be found in Chapter three (3).



	Pre-sch.	Primary	JHS	SHS	Voc/Tech	Special Sch	Train. Coll.	Tertiary
Public Schools	190	237	195	18	22	2	2	3
Private Schools	668	637	311	33	2	2	1	2
Total	858	874	506	51	24	4	3	5

Figure 1.1 Educational Facilities in Kumasi Metropolis

Source: Metro Education Direcorate

1.9 Organization of the Study

The study is organised into five chapters. Chapter one comprises introduction and background to the study, statement of the research problem, research questions, objectives of the study, justification for the study, significance of the study, conceptual definitions and profile of the study area. Chapter two is devoted to literature review which looked at the concept of sex education, historical development of sex education, kinds of sex educational programmes available, sources of sex-related information, sexual behaviours mostly exhibited by in-school adolescents and conclusion drawn from the literature reviewed. The chapter three consisted of the research methodology which included the research design, target population, study population, sample size and sample selection, fieldwork and data collection, tools for data collection, questionnaire administration, response rate, problems encountered in the field, data handling and analysis, tools for data analysis and ethical issues.

The data presentation, analysis and discussions constituted chapter four in which the data gathered on the kinds of sex educational programmes available to in-school adolescents, the sources of sex-related information and the sexual behaviours of in-school adolescents were considered. The concluding part of this chapter looked at the suggested ways to improve sex education. The chapter five dealt with summary, conclusion and recommendations of the study.

CHAPTER TWO

LITERATURE REVIEW

2.0 Introduction

In Sub-Saharan Africa, most of the adolescents do not know how to protect themselves and their partners against HIV/AIDS and sexually transmitted infections. This situation makes it imperative to introduce interventions in areas such as sex education and youth friendly health services for in-school and out-of-school adolescents. The focus of this study is on sex education and its effects on adolescents' sexual behaviour. The literature review covered the following: the concept of sexuality education, historical development of sex education, the types of sex educational programmes, sources of sex-related information for the adolescents and the effects of the sex educational programmes and sources of sex-related information on adolescents' sexual behaviour.

2.1 The Concept of Sexuality Education

Sexuality education is the lifelong process of acquiring information and forming attitudes, beliefs and values about identity, relationships and intimacy. It encompasses sexual development, reproductive health, interpersonal relationships, affection, intimacy, body image and gender roles. Sexuality education addresses the biological, socio-cultural, psychological and spiritual dimensions of sexuality (SIECUS -Sexuality Information and Education Council of the United States) www.siecus.org). According to Maduakonam (2001) sex education is a process whereby information is given or imparted to a group of young ones and which takes into account the

development, the growth, the anatomy and the physiology of the human reproductive system and changes that occur from youth all through stages of adulthood.

Esu (1999) as cited in Esere (2008) defines it as consisting of instruction on the development of an understanding of the physical, mental, emotional, social, economic and psychological phases of human relations as they are affected by sex or simply put, it involves providing children with knowledge and concepts that will enable them make informed and responsible decisions about sexual behaviours at all stages of their lives.

According to British Medical Association Foundation for AIDS, (Esere, 2008, citing British Medical Association (BMA) Foundation for AIDS London, 1997); the aims of sex education include the following: that it should be age appropriate, that it should be available to everyone through a variety of forms and informal settings and finally, that it should have behavioural interventions component since adolescents' characteristics predispose them to high risky sexual activities, hence the need to reduce their at-risk sexual behaviours (Esere, 2008).

First established on a national scale in Europe in the 1960s, developing countries introduced school-based sexuality education in the 1980s. The emergence of HIV/AIDS gave many governments the impetus to strengthen and expand sexuality education efforts and currently, more than 100 countries have such programmes, including almost every country in sub-Saharan Africa (Rosen 2004, citing McCauley & Salter, 1995; Smith, Kippax, & Aggleton, 2000; Rosen & Conly, 1998). Some agencies of the United Nations organizations such as the United Nations Population Fund (UNFPA), United Nations Educational, Scientific and Cultural Organization (UNESCO) and United Nations Children's Fund (UNICEF) have traditionally been the leading international supporters of sexuality education. The World Bank, through its intensified efforts to

help countries fight HIV/AIDS, has also become a major funder (World Bank, 2002b as in Rosen, Murray, & Moreland, 2004). Many other bilateral donors and private foundations and organizations support and promote sexuality education worldwide (Rosen et al., 2004).

2.3 Historical Development of Sex Education

Kutchinsky (1988) & Schmidt (1989) state that within a society or culture, sexuality is also known to vary between different social classes (cited in Traen & Stigum, 1998). They further noted that traditionally, upper-class men have more often cultivated the erotic and sexual pleasure, whereas men and women of the working class have been too exhausted after long, hard working hours to grant sexuality the same position in their lives. The role of sexuality among the working class has been more related to reproduction than to the middle class idea of sexuality as a means of mutual exchange of security, intimacy and pleasure. It could therefore be argued that historically sex education also varies from society to society and from social class to social class.

Adepoju (2005) however, states that sexuality education came into being in different countries at various times. The writer further noted that the sexual revolution of the 1800s contributed immensely to the debate of sexual pleasure as an ethical substance which continued to be governed by relations of force, struggle and establishment of dominion. Again, he pointed out that during the period, women agitated for more debates on issues concerning their sexuality, questioned and revolted against the rules of the concept of virginity and male dominance and regulations prohibiting the use of contraceptives and the spread of information about these contraceptives. In a study regarding sexuality revolution, it was revealed that between 35 and 45

percent of females and 55-65 percent of males engaged in sexual relationships before marriage at that time of the debate (Bruess and Greenberg, 1994 as cited in Adepoju, 2005).

According to Adepoju, (2005) sexuality education started as far back as 1897 when a female Swedish doctor, Karolina Widerstorm, saw the need to educate the young especially the girls about sexual hygiene as a way of informing and protecting them from sexually transmitted infections such as gonorrhoea and syphilis which were found to be very common during that period. To her, the idea was that "if girls got to know in good time how pregnancy came about and how sexually transmitted infections were spread, they would be better able to protect themselves. In this way girls were considered to be able to take responsibility for the sexual health for boys as well as for themselves" (Lena, 2000 as in Adepoju, 2005).

Given the controversial nature of sexuality education at that time, the high prevalence of sexually transmitted infections was used as the basis of introducing sexuality education in the schools. Despite all the positive potentials of sexuality education, the major challenges were what form of sexuality education should it take and at what level it should be introduced in the schools. There was also the problem of methodology. Sexuality education was seen as the gospel of the flesh that could lead to sexual espionage, egoism and revelry (merry-making) among the young ones. The young recipients of sexuality education were therefore referred to as "victims" (Ibid).

Notwithstanding these challenges, serious advocates of sexuality education insisted on driving home the potentials of sexuality education such as building new standards and removing deceptions between people and by the dawn of the 1900s, several events had occurred which changed the way people perceived sexuality hence sexuality education was introduced in

Swedish schools. Talking to the young people about sexual life became less controversial among the Swedish.

As women became empowered with education, their number in the work force increased and this made them assume a visibly significant part of the society. They appeared more aggressive in their demands for equality in all spheres of human endeavour. Overall, they became more active partners in sexual activity. These "new" women, according to Murstein (1974) as cited in Adepoju (2005) wanted freedom similar to that of the men. The rise in the status of women in America during that period also enhanced discussions on sexuality issues. There was significant effect on the receptivity to the subject of sexuality by the people.

In Ghana the sexual culture can be described as a paradox, for sexual matters are among the popular topics for conversation and gossip, but there is less evidence for serious societal debate about sexual issues (Ankomah, 2011). Furthermore, he revealed that many cultural artifacts such as Ghanaian traditional and "high life" music, dances and jokes are frequently woven around sex but the topic hardly comes into the forefront of any formal discussion and blunt questions about sexual matters may encounter serious opposition (Ankomah, 2011).

Also, public exhibition of emotions by lovers through kissing is frowned upon in the country. This does not imply that there is no love in Ghanaian sexual relationships as some foreign writers claim; however, love alone is not enough to persuade parents to approve of a relationship (Ibid).

With regard to informal sources of sexual knowledge in Ghana, traditional forms of sexuality education existed in kinship systems and coming-of-age ceremonies where the youth were tutored about manhood and womanhood. In most Ghanaian societies, the initiation or puberty rites were occasions where guidelines and instructions were provided. This was the traditional

approach to sex education. The training was given by traditionally recognized instructors, usually the elders (Ankomah, 2011).

However, rapid urbanization, increased mobility, education and other agents of change have together undermined the traditional channels of sex education. With very limited access to sex education both at home and in the schools, with long periods of schooling in an unmarried state, the gap between sexual and social adulthood has widened and the modern Ghanaian adolescent faces a sexual dilemma. In addition, in the nineties research revealed that in-school adolescents main sources of knowledge on reproduction were teachers - apparently as part of biology lessons (Ankomah, 2011). On the broad issue of sexual knowledge, students' most frequently get their first information on sex from friends and further from their teachers and relatives (Ankomah, 2011).

Research has shown that there is gender difference in the sources of sex-related information. For instance, Bleek (1976) as in Adepoju (2005) found that girls more than boys tend to rely on relatives, especially their mothers, for their first knowledge on sex education while boys generally receive this information from male friends. However, the role of teachers appears to be equal for both sexes. The literature revealed that a place of residence also determines the sources of sex information. For example Ankomah (2011) found that students also report magazines and books as an important source of sex information in the urban centers.

Concerning government policies and programmes for sex education, the government's attitude toward sex education in Ghana, as in several other Sub-Saharan African countries, can be described as ambivalent (Ankomah, 2011). In a survey in 1987, it was found that all the teachers agreed that there was a need for sex education in schools. When surveyed in 1991, secondary

schools in Accra revealed some disturbing findings showing a high degree of ignorance relating to menstrual cycle and pregnancy. In a study by the Health Education Division of the Ministry of Health conducted in 1990, Junior Secondary School (JSS) students showed that the students thought that it was not possible to get pregnant the first time one had unprotected sex. If these issues are in the urban centers then the situation is expected to be worse in rural schools.

This notwithstanding, some people have argued that the Ghanaian society is open and that the children are not ignorant of human sexuality and hence, it is unnecessary to handle the subject matter in the formal school setting. Others from a religious point of view are worried that sex education is likely to encourage sexual experimentation among sexually quiescent (dormant) adolescents (Ankomah, 2011).

Theoretically, sex education should be covering all the schools, but in practice few schools have a comprehensive programme on family life education. Policy makers, perhaps for the fear of arousing religious opposition, are ambivalent towards sex education. On the one hand, sex education is part of the school curricula in order to acknowledge official interest, yet on the other hand, most officials feel unconcerned that it is not effectively taught, thus pacifying the moral and religious critics. The establishment of junior secondary schools, which marks a radical change in Ghana's educational system, may result in a new approach towards the teaching of sex education. With the new educational structure, family life education at both Junior and Senior secondary school levels is to be covered in a new subject called Life Skills and again at the senior level within Home Economics (Ankomah, 2011).

The schools as potential avenues for information dissemination, sexual and reproductive health cannot be overemphasized. As a result, sexual and reproductive health has been introduced into

the social science syllabi of primary and secondary institutions in Ghana (Awusabo, 2004). Students are expected to be introduced to basics of Family Life Education and in order to response to the need for qualified teachers for the Family Life Education within the school system, the University of Cape Coast started a degree program in population and family life in 1996 (Ibid).

Based on this, the question is what kinds of sex educational programmes are available to adolescents to assist them protect themselves from sex-related consequences: unwanted pregnancies leading to unsafe abortions and sexually transmitted infections.

2.4 Kinds of Sex Educational Programmes

It is widely accepted that young people have the right to sex education, partly because it is a means by which they are helped to protect themselves against abuse, exploitation, unintended pregnancies, sexually transmitted infections and HIV/AIDS. For these reasons the following forms of sex education; abstinence-only sex education, family planning- focused sex education, comprehension sex education and sex resistance skills education have been identified. However, literature on family planning-focused sex education will not be reviewed because it is meant for married couples but not for in-school adolescents. The other three will be reviewed to determine their influence on adolescents' sexual behaviour.

2.4.1 Abstinence-Only Sex Education

The first type of sex education is the abstinence-only programs. Generally, it teaches abstinence from all sexual activity as the only appropriate option for unmarried people (Advocates for Youth, Sexuality Information and Education Council of the United States (SIECUS) 2001). Abstinence only programs often do not provide detailed or any information on contraception for the prevention of sexually transmitted infections and unintended pregnancies (SIECUS, 2001).

The abstinence-only movement is pushing against balance in sex education curricula, by promoting one set of behaviours and values. As compared to comprehensive sex education, abstinence- only turns away from the challenges young people face as they make decisions and yet with no evidence of effectiveness behind it, abstinence-only education was the most preferred choice (Collins, Alagiri, Summers & Morin, 2002).

Brewer, Brown & Migdal (2007) argue that the expectation that adolescents will remain abstinent until marriage is unrealistic. He pointed out that withholding knowledge about contraception and infection-prevention leaves adolescents and young adults needlessly vulnerable to unintended pregnancy and STIs, including HIV/AIDS.

Although the most preferred choice of sex education, the programme is not without its associated problems. For instance, based on systematic reviews, including a large federally funded abstinence-only programmes prove no more effective in getting students to abstain from sex compared with comprehensive or general health promotion programmes (Brewer, 2007 citing, Trenholm, 2008; Underhill, Montgomery, & Operario, 2007). The study by Trenholm (2008) also found that adolescents who participated in abstinence-only programmes had significant gaps in knowledge of STIs.

However, Walcott, Chenneville & Tarquini (2011) found that several comprehensive programmes that encourage both abstinence and condom use have shown significant positive impacts on delaying sex, reducing the frequency of sex or number of partners or increasing condom use while teens participating in a theory-based abstinence-only curriculum delayed sex for only a short period (Jemmott, Jemmott, & Fong, 2010 as in Walcott et al., 2011). Moreover, it has been found that, abstinence-only education programmes frequently employ scare tactics and impose guilt for feelings experienced during normal sexual development (Brewer et al., 2007).

Comparatively, abstinence-only education has failed to achieve its aims due to the following reasons: first, it withholds or distorts scientific knowledge about sexuality and relationships. Second, in place of medically accurate facts, teaching is based on unsupported assumptions and moral platitudes that do not address the physical, social and emotional development needs of youths. Such teachings may be harmful to later expressions of sexuality and to the development of intimate relationships. Thus, abstinence-only education programmes not only fail in their goals but also fail to meet the needs of youths and young adults (Brewer et al., 2007).

Equally important criticism from proponents of evidence-based sexuality education is that abstinence-only-educated teens engage in anal and oral sexual practices in lieu of vaginal intercourse so that they can technically keep their virginity pledges. Due to serious omissions of factual information, these teens are less likely to know that they are at risk for STIs or, if they are aware, are less likely to know how to protect themselves against these infections (Sabia, 2006).

2.4.2 Sex Resistance Skills Sex Education.

The sex resistances skills sex education basically provides information to the adolescents on skills-building with the aim of managing the pressures to have sex before marriage. Another important aim of sex resistance skills is to increase self-efficacy to avoid high-risk behaviours and intentions to avoid sex prior to completing Senior high School. It also intends to increase knowledge, communication about sex and the comfort with that communication. Generally, several studies have found that exposure to sex education is associated with first intercourse at earlier ages and greater contraceptive use (Dawson, 1986; Ku, Sonenstein, & Pleck, 1992, 1993; Marsiglio & Mott, 1986 as cited in Sabia, 2006). However, Ku et al. (1992, 1993) as cited in Sabia 2006, have found that teaching sex resistance skills is associated with a lower frequency of intercourse, fewer numbers of sexual partners and a lower probability of intercourse among male teens.

Comparing sex resistance skills education to that of abstinence only where virginity pledges feature prominently, Bearman & Bruckner (2001) as in Sabia (2006) found that students who take virginity pledges delay intercourse by 18 months relative to those who do not. However they are also more likely to engage in unprotected sex when they do have intercourse. This implies equipping adolescents with the skills of postponing sex involvement, managing the pressures to have sex before marriage and negotiating for safer sex through strong communication skills is a better option.

Additionally, school-based sex education programs have evolved and increasingly gone beyond just the provision of information. Some programmes now aim to build life skills, including negotiation and communication with partners, self-efficacy and to empower young people to

resist peer pressure and to understand their right to information and services to protect their sexual health (Bhana, 2006; IPPF, 2006 & Jonsson, 2003 as cited in Bankole et al., 2007).

According to Sol Gordon (2011) as in Advocates for Youth, 1998 there should be standards of behaviour for adolescents even as well as for adults. These proposed sensible guidelines from parents would be of good help and they include; no one has the right to exploit another person's body, commercially or sexually, no one has the right to bring unwanted children into the world and no one has the right to spread disease. If infected, get medical treatment fast.

These guidelines will help children develop healthy attitudes about sex because with these guidelines, it means that parents are honest, comfortable and well-informed about their own sexuality hence children will have an excellent opportunity to learn how to lead sexually healthy lives (ibid).

Indirectly, adolescents could be equipped with the necessary skills to resist sex by making them peer educators. For instance, research shows that peer educators significantly increase knowledge and self-efficacy among a target population (Hersh, 2011 as in Advocates for Youth, 1998). This finding came out from evaluation of peer education programmes implemented in nine communities in Nigeria and Ghana. However, the evaluation revealed gender difference in terms of peer education. That is peer sex education is the most effective among secondary school students and that males are more receptive to peer education than are females (Lane & Association for Reproductive and Family Health, African Regional Health Education Centre, 1997 as in Advocates for Youth, 1998).

According to Wilson, Dalberth & Koo (2010) strategies such as emphasizing life goals, establishing rules and expectations, enforcing discipline, monitoring friends and activities and developing a strong relationship with children are all aimed at promoting positive development. This implies that emphasizing on issues like life goals and others will indirectly make adolescents resist from acts as such sexual activity in order to achieve these goals.

Another potential area in sex resistance education is the ability of adequately talking to a sexual partner about sexual history and STIs/AIDS as a preventive measure to the protective potential of safer sex communication.

2.4.3 Comprehensive Sex Education/Abstinence-Plus/ contraceptive- based sex education

Comprehensive sexuality education, also called Abstinence-Plus education or contraceptive-based sex education, views sexuality as a health and human development issue. It supports education that will advance individual well-being and prevent physical and emotional problems. This type of sexuality education is age-appropriate, medically accurate and it encourages youths to be abstinent until they are physically, mentally, and emotionally ready for mature sexual relationships. It also teaches how to explore personal values and to let these values guide relationships. In addition, it teaches how to set limits and how to deal with social, media and partner pressure. In this programme, participants are taught how to avoid sexually transmitted infections (STIs) and how to avoid pregnancy by providing information about contraception including how to obtain it, how to use it and how to negotiate with a sexual partner for its use (Brewer et al, 2007).

In addition, comprehensive sexuality education programming is based on scientific knowledge about human development, practices which promote sexual health and the means to control one's fertility. There are four primary goals of comprehensive sex education which include the following:

1. To provide information about human sexuality, including human development, relationships, personal skills, sexual behaviour, sexual health and society and culture.

2. To provide an opportunity to question, explore and assess sexual attitudes in order to develop values, increase self-esteem, create insights concerning relationships with members of both genders and understand obligations and responsibilities to others.

3. To help develop interpersonal skills—including communication, decision-making, assertiveness and peer refusal skills and help to create satisfying relationships.

4. To help create responsibility regarding sexual relationships, including addressing abstinence, resisting pressure to become prematurely involved in sexual intercourse and encouraging the use of contraception and other sexual health measures (Walcott et al., 2011, citing SIECUS, 1991).

Comprehensive sexuality curricula vary greatly in content, but what all have in common and what distinguishes them from abstinence-only education programs, is the inclusion of information about safer sex practices. In their study of Safer Choices, Kirby (2004) as cited in Brewer et al., (2007) the results suggest that the programme was effective for improving condom use, reducing the frequency of sex without a condom and reducing the number of sexual partners.

Thus, the majority of the research available supports comprehensive sexuality education than Abstinence-only education for the latter appears to help delay the onset of sexual activity for younger adolescents who have not yet initiated sex but, it may not provide the knowledge and skills necessary to protect youth once they become sexually active (Walcott et al, 2011). For instance, Coyle (2010) as cited in Walcott et al., (2011) confirms that there is an increased condom usage rates and reduced frequency of sex without condoms for more than 31 months after a comprehensive sex education. The findings of Ku et al., (1992, 1993) as cited in Sabia (2006) are also consistent with these findings.

Additionally, comparing a comprehensive sex education with abstinence-only education, it has been observed that abstinence-only where virginity pledges feature prominently delay intercourse by 18 months relative to those who do not, but also they are more likely to engage in unprotected sex when they do have intercourse (Bearman & Bruckner, 2001 as in Sabia, 2006).

However, several studies have found that exposure to sex education is associated with first intercourse at earlier ages and greater contraceptive use (Dawson, 1986; Ku et al., 1992, 1993; Marsiglio & Mott, 1986 as in Sabia, 2006).

Finally, it is worth noting that it has been established that short term curricula, whether abstinence-only or contraceptive-based sex education programmes, have little or no impact on teen sexual behavior. Rather, intensive long-term programmes with specific, clear goals and well-trained instructors tend to have the largest behavioural effects (Sabia, 2006).

Sexuality education in the schools is a hot button issue in part because it is closely intertwined with social and parental interpretations of right and wrong and with people's feelings about religion and personal autonomy. Yet sex education is also intended to serve a very practical

public health purpose that is to reduce STIs, HIV/AIDS and unwanted pregnancy among the country's young people (Collins et al., 2002). As a result, there is always a debate as to which way to go that is comprehensive sex education or abstinence-only sex education. What then is comprehensive sex education? According to Collins et al. (2002), it emphasizes on the benefits of abstinence while it is also teaching about contraception and disease-prevention methods, including condom and contraceptive use.

This notwithstanding, the debate centers on a question of methods that is how to prevent negative health outcomes and the ancillary goals of advocates on all sides for instance teaching particular moral values or encouraging autonomous decision- making (Collins et al., 2002).

According to Collins et al. (2002) the personal and social cost of unprotected teenage sexual behaviour are numerous and they include: STIs with attendant social and economic consequences, pelvic inflammatory disease, which is often the consequence of an untreated or improperly treated STIs and infertility. Moreover, research suggests that adolescent girls who become mothers are less likely to complete high school and children born to younger teens may also experience poorer health outcomes, lower educational attainment and higher rates of adolescent childbearing (Planned Parenthood of America Facts Sheet, 2002 as in Collins et al., 2002). Also, Gueye et al., 2001 as cited in Bankole et al., 2007 have found that initiating sex at a younger age is positively associated with increased lifetime number of sexual partners and consequently, increased chances of infection with HIV and STIs.

Other studies have found that regardless of the kind of sex education, dynamics within relationships often determine whether contraceptives are used (Collins et al., (2002). This means that the longer a sexual relationship, the less likely young people are to use condoms Kirby

(2001) as in Collins et al., 2002. Non use of contraception is also reported because of drinking and drug use (Collins et al., 2002).

Comprehensive sexuality education stipulates that every individual has the right to medically accurate, scientific knowledge about sexuality and access to health and reproductive services to foster physical and emotional well-being across the lifespan. Brewer et al. (2007) argued that although abstinence-only education programmes claim to promote morality, it is a sad fact that these programmes are ultimately immoral because they withhold potentially life-saving information and services related to sexuality, a fundamental biological process.

2.5 Sources of Sex-Related Information for Adolescents

This aspect of the review examined the sources of sex information to adolescents. These sources could be numerous and varied but for the purposes of this study, two main sources are explored. These are the persons or group of persons (interpersonal sources) from whom in-school adolescents mostly obtain sex-related information and the places (media sources) where the in-school adolescents mostly get information concerning sex.

2.5.1 Interpersonal sources of sex-related information

As regards the interpersonal sources from whom adolescents mostly get sex-related information, the literature revealed that it is mostly from peers or friends. Various studies revealed that adolescents mostly obtain sex information from their peers or friends. For example Sutton (2008) and Gould & Mazzeo, (2012) found that adolescents prefer to obtain sex-related information from peers or friends. This is probably because the most preferred choice of sex education of agents of socialization such as parents, religious bodies, teachers, etc is the abstinence-only

which mostly withholds knowledge about contraception and infection-prevention. Additionally, DiClemente (1993) as in Mason (2003) found that teens often find peer educators more credible than adult educators because the peer educators communicate in readily understandable ways and serve as positive role models while dispelling misperceptions that most youth are having sex. Kumi-Kyereme, Awusabo-Asare, Biddlecom & Tanle (2007) have also found that peers were seen to be sympathetic and ready to listen than adults. They further reported that child/parent communication on sexual and reproductive health issues, when it occurred, was mostly in the form of instructions and left little or no room for discussion. This probably explains why most of the adolescents tend to seek for sex-related information from their peers or friends.

In Ghana, empirical evidence indicates that adolescents show high levels of connectedness to family, adults, friends and social institutions like the school and religious groups. It has also been established that high levels of adult monitoring over the adolescents are also observed, but communication with family about sex-related matters was not as high as with non- family members –mostly friends and teachers (Kumi-Kyereme et al., 2007). This absence of communication about sex-related matters with adolescents may push them to seek for information concerning sex from outside the family.

2.5.2 Media Sources of Sex-Related Information

With particular reference to places from where adolescents mostly obtain sex-related information, several studies have shown that adolescents get information concerning sex from the radio, television and newspapers. For instance, Adjaloo, (2011) and Sutton, (2008) reported

that adolescents mostly get their information on sex from the media which comprises television, movies, magazines or the internet.

2.6 Sexual Behaviour

It has been established that there is a relationship between socio-demographic characteristics such as age, religion, family structure (monogamous or polygamous), educational levels of parents and co-residence and sexual behaviour (Ruth, 2007 & Kumi-Kyereme et al., 2007). All these socio-demographic characteristics can have either positive or negative influence on adolescents' sexual behaviour. For instance, Ruth (2007) reports that age, gender and economic disparities increase risky sexual behaviour and reduce a young woman's ability to negotiate for safer sexual behaviours.

Moreover, the availability of information especially sex–related information in the form of sex educational programmes and how this piece of information is delivered to its beneficiaries or young people can equally influence the sexual behaviour of young persons in general and in-school adolescents in particular. There may be numerous kinds of sexual behaviours but for the purpose of this study, three kinds of sexual behaviours are explored which include: sex initiation, contraceptive use and number of sexual partners.

2.6.1 Early Sex/Sex initiation

In the year 2000, the government of Ghana published the Adolescent Reproductive Health Policy with the broad objective of promoting healthy environment and policy framework within which young people can obtain information and services on reproductive health and exercise their reproductive rights (GOG, 2000). Specifically, the policy was to motivate young people to

increase the age of the onset of sexual activity, which was around 12 years to older than 15 years by 2010.

Adu-Mireku (2003), reports that about twenty-six percent(25.7%) of sexually experienced Senior High in-school adolescents in Accra have had their first sexual intercourse at age 11 years or younger and by 16 years about 64.7% have initiated their first sexual intercourse. The expectation is that as the years roll by, the age of the onset of sexual activity should also increase as the Adolescent Reproductive Health Policy seek to achieve. However, research conducted recently among Junior High Students (JHS) within the Kumasi Metropolis by Adjaloo (2011) revealed that students from JHS engage in sexual intercourse and sometimes even below the age of 10 years with persons 5 years older than them. It has also been established early that sexual activity is associated with a lot of risks. For example, Morris et al. (1993) argued that age at first sexual intercourse is important because early initiation is predictive of the number of lifetime sexual partners.

2.6.2 Contraceptive Use/Unprotected Sexual Activity

There is the tendency to assume that with the very high level of awareness of HIV/AIDS and its major mode of transmission being sexual intercourse in the Ghana (Neequaye, 1991 as cited in Adu-Mireku, 2003), unprotected sex would have been reduced to the barest minimum but surprisingly the situation on the ground is different. For instance, Adu-Mireku (2003) found that about twenty-five percent of in-school Senior High adolescents in Accra reported being sexually experienced and 55.7 percent of them did not use a condom at last sexual intercourse which is very serious. Furthermore, Adjaloo (2011) who examined the HIV Risk-Reduction Measures among Adolescents in Junior High Schools in the Kumasi Metropolis found that about 63

percent of the JHS students engage in unprotected sex. This behaviour undoubtedly exposes the adolescents to risks and dangers such as sexually transmitted infections, unwanted pregnancies with their associated problems like unsafe abortions and maternal deaths. The crux of the argument is that findings from a study by Morris, Warren & Sevgi, (1993) showed that among adolescents who have engaged in sexual intercourse, their use of condoms and contraceptives reduces and thereby exposing them to risks such as STIs including HIV infection and unintended pregnancies.

In another development, studies by DiClemente (1991): (1992) & Brieger (2001) as in Mason (2003) found that peer education significantly increased condom use among in-school youth and out- of- school adolescents. These findings are consistent with the West African Youth Initiative which implemented and evaluated peer education programmes in schools and out-of-school settings in Ghana and Nigeria.

2.6.3 Sexual Partners

Studies on adolescent's sexual behaviour reveal that some of sexually active ones have multiple sex partners. Adjaloo (2011) found that JHS students have had multiple sexual partners and even some had sexual experience with commercial sex workers. Ruth (2007) found that in sub-Sahara Africa there is a widespread transactional component to sexual relations for adolescent girls who are not engaged in trafficking and prostitution and various reasons have been found through empirical evidence to account for the incidence of multiple sex partners; willingness to engage in a wanted relationship, coercion and violence; sex for survival and sex for upward economic mobility (Ruth, 2007, citing Nkosana, 2006).

Additionally, Weissman (2006) as cited in Ruth, 2007 reported that girls and young women who are involved in cross-generational sex see it as quite different from prostitution. These attitudes of theirs encourage them to engage in transactional sexual relationships resulting in having multiple sexual partners. Also, Traen & Stigum, (1998) found that more men than women reported parallel sexual relationships.

2.7 Some Preliminary Conclusions

Based on the literature reviewed so far, the following preliminary conclusions could be drawn:

The emergence of HIV/AIDS compelled governments to strengthen and expand sexuality education in order to protect the next generation.

Three kinds of sex educational programmes have been identified: abstinence from sex, sex resistance skills and contraceptive-based sex education.

Adolescents mostly obtain sex-related information from their peers or friends and television, movies, magazines and internet and they start sexual activity between 10 and 12 years.

Adolescents, especially young women engage in multiple sexual activities due to economic reasons such as sex for survival and upward economic mobility while male adolescents have multiple sexual partners due to the power dynamics such as coercion and violence.

2.8 Conceptual Framework for the study

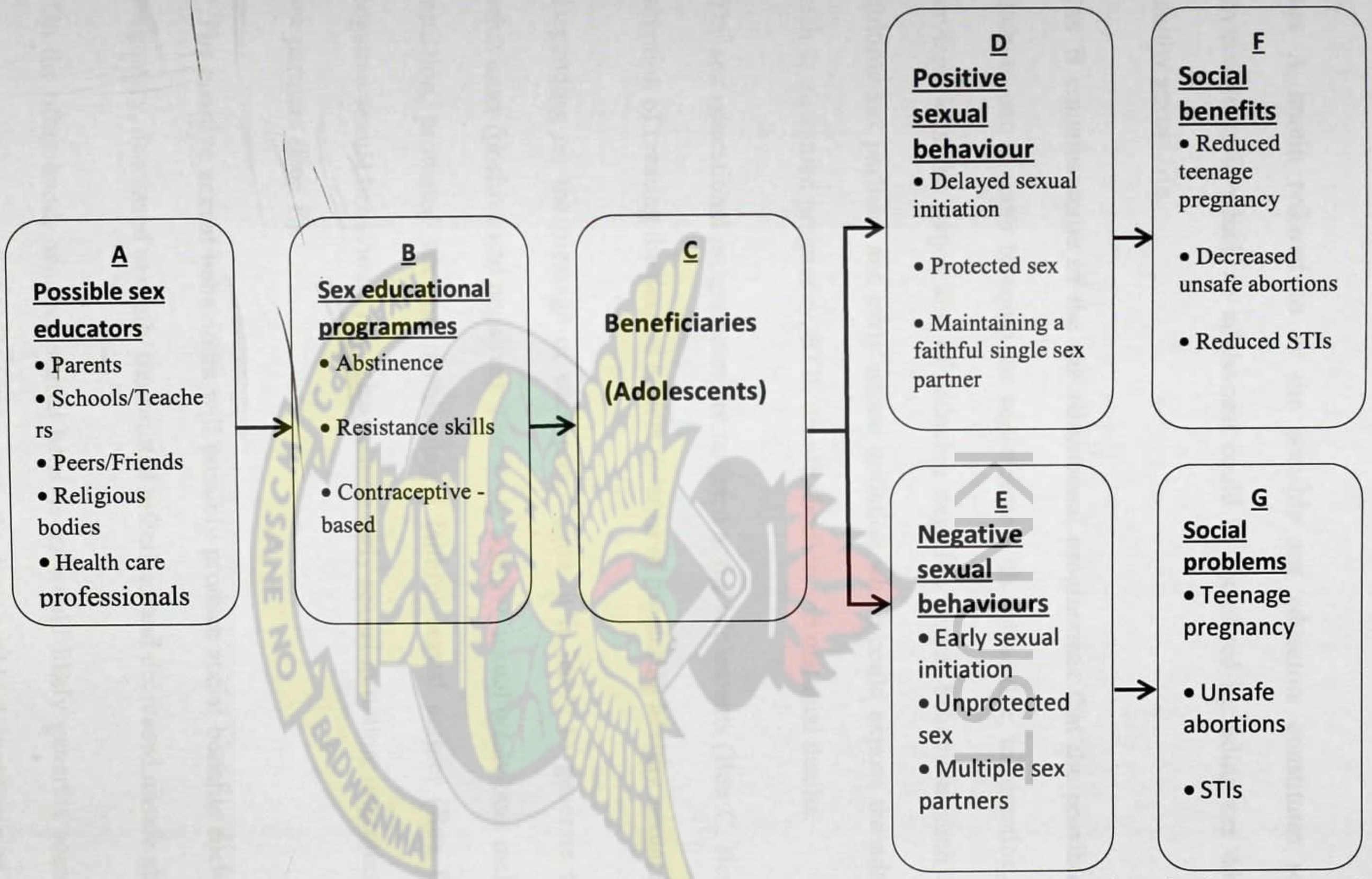


Figure 1.1: A Conceptual Framework Showing the Relationship between Sex Education and Sexual Behaviour among In-school Adolescents

Source: Author's Construct, 2011

2.8.1 An Explanation of the Conceptual Framework

Box A herein referred to as the possible sex educators constitutes some of the social environments in which an adolescent could be socialized including sex education to promote healthy sexual life.

Box B contains some of the sex educational programmes that the possible sex educators are likely to use in order to equip the adolescents with knowledge, information, skills and possibly services with the major aim of reducing negative sexual behaviour such as unprotected sex, multiple sex partners and early sexual initiation which could expose the adolescents to dangers such as unwanted pregnancy, STIs, unsafe abortion and maternal deaths.

The sex educational programmes are targeted at the adolescents (**Box C**, Beneficiaries) with the intention of creating the desired effects in terms of promoting healthy sexual life.

Depending on the message of each programme, it is likely to generate two possible sexual behaviours (positive and negative). The likely positive sexual behaviours include: delayed sexual initiation, protected sex and maintaining a faithful sexual partner (**Box D**) and the possible negative sexual behaviours may also include early sexual initiation, unprotected sex and multiple sex partners **(Box E).**

The positive sexual behaviours will possibly produce social benefits such as reduced teenage pregnancy, decreased sexually transmitted infections and decreased unsafe abortions **(Box F).**

On the other hand, negative sexual behaviours would likely generate social problems such as high rates of unwanted pregnancies, unsafe abortions and high incidence of sexually transmitted infections including HIV/AIDS **(Box G)**.

In order to deal with the likely negative effects (social problems), recommendations will be sought to minimize their occurrence.

In a summary, adolescents may be socialized by the agents of socialization such as the family, the school, peers, the religious institutions and health care professionals on matters relating to sex through well designed programmes such as abstinence-only sex education, sex resistance skills education and comprehensive/contraceptive-based sex education. When these programmes are executed to their target group (adolescents) herein referred to as the primary beneficiaries, there are two possible outcomes; positive and negative sexual behaviours which will in turn produce social benefits or social problems.

CHAPTER THREE

RESEARCH METHODOLOGY

3.0 Introduction

In order to find answers to the research questions and thus, suggest solutions for redressing the problem under investigation, some specific series of steps were necessary to arrive at scientific evidence for analysis and conclusion. This chapter is, therefore, dedicated to outlining the methods of sampling, data collection and data analysis. The methodology employed in order to carry out the study included: the research design, sources of data, study population, sample selection and sample size, data collection methods, data analysis and ethical issues.

3.1 Research Design

The study design is a mixed method (quantitative and qualitative) with concurrent triangulation as a strategy of inquiry. This method allowed for both quantitative and qualitative data to be collected concurrently and the two forms of data are merged in order to provide a comprehensive understanding of the problem. The results were displayed side-by-side with the quantitative statistical first and followed by qualitative quotes to support or disconfirm or to reinforce each other.

The quantitative aspect of the study designed two sets of questionnaires for the data collection. One set of questionnaire was directed to the in-school adolescents and another for the key informants (teachers, health workers and parents). The information from the key informants was to confirm or reject what the adolescents have reported. The qualitative aspect used Focused

Group Discussions (FGDs) for only the in-school adolescents because the researcher wanted explanation and description of life experiences of the issues. Descriptive and inferential statistical tools were employed to analyse data collected. For the descriptive statistical tools, frequency tables were used to analyse the two set of questionnaires but the inferential statistical tool such as multivariate linear regression techniques were employed to test the hypotheses of the study from students' data only and did not include that of the key informants.

3.2 Sampling Procedure

This involves a description of the process used by the researcher in arriving at an appropriate sample size for the study. The sampling procedure comprised an identification of the target population, study population and sampling units including the determination and selection of the sample size.

3.2.1 Target Population

The study was targeted at all adolescents between the ages of 14-19 years who were then enrolled in the public and private Senior High Schools in Ghana. The age group was between 14 and 19 because the current educational policy in Ghana is: 6 years for primary, 3 years for Junior High School and this makes it possible for students at the second cycle to fall within 14 and 19 years. An earlier study by Adjaloo (2011) among Junior High School (JHS) students within the Kumasi Metropolis showed that the minimum year was 12 and the maximum was 19 years. This suggests that majority of the JHS students would be in Senior High School (SHS) between 14 years and 19 years.

3.2.2 Study Population.

The study population constituted all the students in public and private Senior High Schools within the Kumasi Metropolis in the Ashanti region of Ghana. Therefore, all boys and girls who are currently in senior high schools in the Metropolis qualify to be sampled for participation in the study.

3.2.3 Sampling Units

The in-school adolescents from the six selected schools in the Kumasi Metropolis constituted the sampling units. In addition to the students were the key informants who comprised parents, health workers and Teachers who interact with the adolescents in the socialization process.

3.3 Sample and Sampling Techniques

This section discussed how the schools and the student respondents were selected as well as the key informants.

3. 3. 1 Selection of Schools

There are about fifty-one (51) Senior High Schools (SHS) within the Kumasi metropolis (Kumasi Metro Education Directorate, 2011) constituting 18 public schools and 33 private schools. Due to time and financial constraints, this study could not cover the whole population but focused on four (4) public Senior High Schools and two (2) private Senior High Schools.

The four public schools were purposely selected based on three factors (sex, day and mixed). For the private schools two of such schools were purposely selected for most of the private schools are mixed.

3.3.2 Sample Size

Ten percent (10%) of the total population of the six schools constituted the sample size. The total population of the six selected schools was 13,579 and ten (10%) percent of it was 1,358. The sample size was further scaled down by four which gave 340 respondents. Based on two rules of thumb the sample size of 344 was determined. First, according to Neuman (2000), for sample size determination, there are rules of thumb (conventional or commonly acceptable amount) for sample sizes. For the purpose of this study two of such rules were employed to determine the sample size. For moderately large populations, for instance 10,000, 10% is needed for accuracy. Thus, 10% of the total population of the six selected schools (13579) was taken and this gave (1358 respondents). The second rule employed was, smaller samples are sufficient when the population is homogeneous hence the 1358 was further scaled down by four to give a total of 344. Practical limitations in terms of cost and time on the part of the researcher equally contributed in determining the sample size for the study.

3.3.3 Selection of Student Respondents

Based on year group, proportionate random sampling was used to get the sample for each of the six schools and respondents for each year group. Finally, since the respondents were homogeneous, that is 1st year students, 2nd year students, 3rd year students and 4th year students,

the individual respondents were then selected at random. Detailed information on the selection of the student respondents is discussed below.

For the six schools (A-F), each has a total population as indicated against it.

A=2705 B=2721 C=1864 D=2612 E=2095 F=1582

Ten percent (10%) of the total number of students per year was calculated and the resultant was further scaled down by four (to a quarter) to give a total number of respondents for each year group.

For instance, to get the total number of respondents for SHS1 in School A, 10% of 689 which is the total number of students in SHS1 in school A. This gave 68.9 (69). The 69 is further divided by four to give 17 respondents eligible to participant in answering the questionnaire from SHS1 in School A. The same method was used to get the respondents for each year group for the six school studied (see Schools A-F)

School A:

10%

1^{ST} Year = 689 =69 ÷4 =17

2^{nd} Year = 782 =78 ÷4 =20

3^{rd} Year =696 = 70÷ 4=18

4^{th} Year = 538 =54 ÷4=14

2705 69

School B:

10%

1^{ST} Year = 646 =65 ÷4 =16

2^{nd} Year = 698 =70 ÷4 =18

3^{rd} Year =732 = 73÷ 4=18

4^{th} Year = 645 =73 ÷4=16

2721 68

School C:

10%

1^{ST} Year = 539 =54 ÷4 =14

2^{nd} Year = 489 =49 ÷4 =12

3^{rd} Year =457 = 46÷ 4=12

4^{th} Year = 379 =38 ÷4=10

1864 48

School D:

10%

1^{ST} Year = 777 =78÷4 =20

2^{nd} Year = 547 =55 ÷4 =14

3^{rd} Year =497= 50÷ 4=13

4^{th} Year = 791 =79 ÷4=20

2612 67

School E:

10%

1^{ST} Year = 538 =54÷4 =14

2^{nd} Year = 503 =50÷4 =13

3^{rd} Year =567= 57÷ 4=14

4^{th} Year = 487 =49 ÷4=12

2095 53

School F:

10%

1^{ST} Year = 370 = 37÷4 =09

2^{nd} Year = 474 = 47 ÷4 =12

3^{rd} Year = 372 = 37÷ 4=09

4^{th} Year = 366 =37 ÷4=09

1582 39

3.3.4 Selection of Key Informant

In this study 19 key informants were purposely selected. These include: parents, Social Studies teachers and health professionals/workers because they find themselves in unique positions in the social environments within which adolescents are socialized. The composition of the key informants was as follows: three (3) heads of family planning units, one each from: Komfo Anokye Teaching Hospital (KATH), Kumasi South Hospital (KSH) and Manhyia Hospital. In terms of the structure of health institutions in Kumasi, KATH is a teaching hospital and a tertiary facility, KSH is a regional hospital for Kumasi but it operates as a sub-metro hospital and the Manhyia Hospital is a district health facility. The selection is done with the health structure as a guide to cater for each category.

Furthermore, six (6) Social Studies Teachers from each of the six selected schools were purposely sampled for the study. This is because these teachers teach social studies in which family life education is part so they will be able to provide crucial information on sex education and adolescents reproductive health issues. Finally, ten (10) parents who have their wards in Senior High Schools were also conveniently selected and completed self –administered questionnaire.

3.4 Methods of Collecting Primary Data

A self-developed and a slightly modified version of the 2005 Adolescent Sexual and Reproductive Health Project Survey of Junior Secondary School Pupils Questionnaire (an instrument which was developed by Navrongo Health Research Centre (NHRC) was used to collect data for the study. An anonymous self- administered questionnaire was used because all the respondents (students and key informants) can read and write. Three Focused Group Discussions (FGDs) one each for Boys Only Group, Girls Only Group and Boys and Girls

Group were conducted with the in-school adolescents who did not take part in answering the questionnaire. With informed consent from the adolescents the information from the FGDs was videotaped.

The questionnaire was administered and the FGDs organized with the assistance of a female National Service Person from the Kwame Nkrumah University of Science and Technology.

Respondents were informed that completing the survey was voluntary and were also informed of their right to decline participation at any time. However, they were encouraged to complete the questionnaire because the information they were providing was going to be kept in strict confidence.

3.5 Field work

Letters of introduction were sent to the selected schools for approval before the commencement of the study. This gave the researcher the opportunity to explain the essence of the study and the time for data collection. Again, the researcher used the opportunity to collect information on the total number of students per level to be able to select the appropriate sampling technique

3.5.1 Piloting of Questionnaire

The questionnaires for the study were piloted in **Faith Senior High School**, which was not one of the selected schools for the study. The aim of the pilot test was to assess the logical sequence of the items and to clarify the wording of the questionnaire. It was also to determine the feasibility of the design procedure for data processing, analysis and any potential problems.

The respondents were debriefed and assured of the confidentiality of the information required. Again, they were also told that participation was voluntarily and they could withdraw from it anytime and that was not going to affect them in anyway. In order to try and reduce possible bias, the questionnaire was completed in the absence of an authority figure (i.e. school teacher) during the answering of the questionnaire to enable respondents feel free and be at ease in providing the information required.

Based on the pilot test, some questions were reformulated and others deleted. Again, there was the need for adequate instructions especially for filter questions and that was adequately catered for in the main survey.

3.5.2 Questionnaire Administration

The participants (in-school adolescents and the key informants) completed a self-administered questionnaire which measured; kinds of sex educational programmes available to in-school adolescents, sources of sex-related information for the adolescents and the effects of the sex educational programmes on their sexual behaviour.

3.5.3 Conduct of Focused Group Discussions

The three Focused Group Discussions (FGDs) were conducted in three out of the six schools for Boys Only Group, Girls Only Group and Boys and Girls Group. Each group was made up of between seven (7) and ten (10) members who did not take part in answering the questionnaire. The FGDs enabled the researcher to elicit more information such as sexual life experiences from the respondents on the topic. The FGDs measured variables such as kinds of sex educational

programmes, sources of sex-related information, sexual behaviour of the adolescents and suggested ways to improve sex education.

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3.5.4 Response Rate

The response rate was generally encouraging because a total number of 344 students from the six schools were selected and corresponding number (344) of questionnaires were distributed. Out of this number (344), 326 of them were answered and returned indicating 95% response rate.

For the key informants the response rate was 100% although it took a longer time to get the answered questionnaires as compared to those from the student respondents.

3.5.5 Encountered Field Problems

Some of the problems encountered during the data collection were numerous and varied. The major challenge was that some of the schools were writing their end of second term examinations so getting the students was difficult. In consultation with the Head teachers of two schools, the researchers were scheduled to come in the evening during their preps time for the data.

The other major problem encountered was with the final year students (SHS4) who had finished writing their mock exams and were scattered all over the school compound to revise privately for their final exams. The researchers were directed to uncompleted school buildings to get them to answer the questionnaire.

There was one school the researchers had to go there five times because the school had lost a student and the Assistant Headmaster who was assigned to assist the researcher in connection

with meeting the students was busy organizing the funeral. The researchers had to book an appointment with him in his house where he assigned another teacher to assist in the data collection.

In spite of these challenges encountered during the data collect process, the timing of the data collection did not greatly interfere with academic work hence a high number of respondents.

3.6 Secondary information

The secondary data was gathered from the scholarly articles on sex education, adolescents' sexual behaviour and reproductive health in general. Books, policy reports and documents were also consulted during the literature review to ascertain what was known in the area of sex education and adolescent sexual behaviour.

3.7 Data Analysis

Quantitative data from (students and key informants) was carefully edited before entering into the computer. Following the data entry, data were cleaned by running frequencies of all the variables to check for incorrectly coded data. Incorrectly coded data was double checked with the raw data in the questionnaire. The data was analyzed using Statistical Package for Social Scientists (SPSS) 17.0. The data was analyzed both quantitatively and qualitatively using descriptive and inferential statistics. The descriptive statistics was made up of frequency tables which allowed for comparison of responses. The inferential statistical tool employed multivariate regression technique which was used to test the hypotheses.

Quantitative data gathered from key informants were analyzed using frequency tables and percentages. The main aim of the data from the key informants was to confirm or reject what the adolescents have said in relation to the kinds of sex educational programmes, sources of sex-related information and suggested ways to improve sex education.

3.8 Ethical Issues

Ethical issues such as informed consent, anonymity of respondents, confidentiality, voluntarism and plagiarism were catered for in the study.

Administrative approval was first sought from school authorities before approaching the students for assent to participate in the survey. In a survey like this type, there was the need for debriefing in order to counsel the respondents and psyche them up in order to avoid the possible psychological and emotional harm that the study may cause to the respondents.

The respondents were assured again and again that the information they provided was going to be kept in strict confidence and that their identities were not to be attached to the information given (the names of students and their schools). Again, the information provided has been used only for academic purposes and nothing else that is participants were fully informed of the purpose of the study and guaranteed that all information obtained was going to be treated confidentially and anonymously.

The purpose of the study was explained to the potential respondents before individual verbal informed consent was sought from the study participants, with emphasis on their freedom to withdraw at any time thus, guaranteeing voluntarism to participate.

Pieces of information which were used from other people's work have been duly acknowledged as in-text referencing and bibliography with aim of avoiding plagiarism or academic dishonesty.

CHAPTER FOUR

DATA PRESENTATION, ANALYSIS AND DISCUSSIONS

4.0 Introduction

The chapter presents the data analysis and discussions of the study which sought to examine the effects of sex education on in-school adolescents' sexual behaviour. The findings of the study have been grouped broadly into two – data analyzed from responses given by student respondents and those analyzed from responses given by key informants. The first broad category of analysis was further broken into six areas. These include; socio-demographic characteristics of respondents, kinds of sex educational programmes available to in-school adolescents, sources of sex-related information for the adolescents and sexual behaviours likely to be exhibited by the in-school adolescents. The others are: suggested ways to improve sex education and the relationships between sex education and sexual behaviour on one hand and the association between sources of sex-related information and sexual behaviour on the other hand.

The second broad category of analysis comprised views and perceptions of key informants (Parents, Teachers and Health workers) in relation to sex education, sources of sex-related information and suggested ways to improve sex education. Parents, teachers and health workers play a very important role in the socialization process of adolescents in relation to their general well-being including reproductive health. It is in the light of this that their views were sought on issues related to sex education because understanding the views and perceptions of these agents of socialization would be essential in designing appropriate educational activities in this regard.

4.1 Socio-demographic Characteristics of Respondents

The background information of the core respondents studied in this work included: sex, age, religious affiliation and residential status as a student, current level in school, family structure and region of residence during vacation. This is because in a study like this, adolescents' socio-demographic characteristics are very important indicators of the kind of sexual behaviour adolescents they can adopt and maintain for adult life.

For the key informants, the socio-demographic characteristics examined in the study included sex, age and religion. This background information is essential because it will help to determine how to design and implement appropriate educational programmes and policies in relation to sex education as the key informants (parents, teachers and health professionals) are the agents of socialization and can significantly influence the students positively.

4.1.1 Sex Distribution of Student Respondents

To help determine how to design and implement appropriate educational programmes and policies in relation to sex education, the sex distribution of both executors and the beneficiaries is worth studying.

The results showed that majority (N=175, 53.7%) of the respondents were females and the male population was (N=151, 46.3%). In a country where girl child education is constantly preached and the girl child is encouraged to be in school, it is not surprising to realize that majority of the student respondents were females and the males were in the minority as indicated in Table 4.1a.

Table 4.1a: Sex Distribution of Student Respondents

Sex	Frequency	Percent
Male	151	46.3
Female	175	53.7
Total	**326**	**100**

For the key informants, the study revealed that majority (N=10, 52.6 %) of the respondents were females and (N= 9, 47.4 percent) of them were males (Table 4.1b)

Table 4.1b: Sex Distribution of Key Informants

	Sex Distribution		
Key Informants	**Male (%)**	**Female (%)**	**Total (%)**
Parents	31.6 (6)	21 (4)	52.6 (10)
Teachers	15.8 (3)	15.8 (3)	31.6 (6)
Health workers	0 (0)	15.8 (3)	15.8 (6)
Total	**47.4 (9)**	**52.6 (10)**	**100 (19)**

Source: Author's field survey, 2012

It is worth noting that in both the core respondents and key informants, majority of them were females (N=175, 53.7%) and N=10, 52.6%) as indicated in tables 4.1a & 4.1b. This suggests that educational programmes and activities in this regard should be gender sensitive in order to achieve the desired results. That is gender must be seriously considered in terms of design and implementation on one side and the beneficiaries of these programmes and policies on the other side.

4.1.2 Age Grouping of Core Respondents

In terms of sex education and sexual behaviour, age is very crucial because it will determine, when and how to deliver such a life saving information. The study showed that majority (N=182,

55.8%) of the student respondents were between 16 and 18 years and the least age group of 22-24 years and above was (N=13, 4.0%) as indicated in Table 4.2a.

Table 4.2a: Age Range of Core Respondents

Age	Frequency	Percent
13-15 years	15	4.6
16-18 years	182	55.8
19-21 years	116	35.6
22-24 years and above	13	4.0
Total	**326**	**100**

Source: Author's field survey, 2012

The majority (N=182, 55.8%) of the core respondents were between 16-18years and this showed that there is a possibility that the results of the age group of the respondents confirm the age of completion of Senior High School. For those in the least age group of 22-24 and above, it is possible that they did not start primary school early.

The results from Table 4.2b indicated that (N=9, 47.2%) of the key informants were within the age range of 37 and 42. A small proportion of them (N=2, 10.5%) were within 47 and above years.

Table 4.2b: Age Range of Key informants

Key Informants	Age Groups				
	25-30yrs (%)	**31-36yrs (%)**	**37-42yrs (%)**	**47 + yrs (%)**	**Total (%)**
Parents	5.3 (1)	0 (0)	36.8 (7)	10.5 (2)	52.6 (10)
Teachers	5.3 (1)	21.1(4)	5.3 (1)	0 (0)	31.6 (6)
Health workers	10.5 (2)	0 (0)	5.3 (1)	0 (0)	15.8 (3)
Total	**21.1 (4)**	**21.1 (4)**	**47.2 (9)**	**10.5 (2)**	**100 (19)**

Source: Author's field survey, 2012

The age distribution of the key informants suggests that they were relatively young and energetic. Possibly, they can seriously and vigorously design and implement intervention programmes and activities in relation to sex education aim at promoting healthy sexual life and protecting the next generation.

4.1.3 Religious Affiliation of Student Respondents

In addition to measuring religion for obtaining demographic profile of respondents, it appears to play an important role in shaping the sexual behaviour of its members. For instance, most religions abhor premarital sex.

The results indicated that majority (N=292, 89.6%) of the core respondents in the study were Christians. A few of the respondents were from other religious backgrounds as indicated in Table 4.3a.

Table 4.3a: Religious Affiliation of Core Respondents

Religion	Frequency	Percent
Christian	292	89.6
Islamic	31	9.5
Traditional	2	.6
Buddhist	1	.3
Total	326	100.0

Source: Author's field survey, 2012

The results presuppose that Ghana is a Christian nation thereby influencing her educational system. Consequently, it is important to take into consideration religion as a determinant in the design and implementation of any intervention in the field of sex education in order to create the desired impact.

According to Collins et al., (2002), the Christian religion is seen as less rigid and highly adaptable to societal change. It thus, accepts intermingling of people of the opposite sex, half-naked dressing and female assertiveness. It also tolerates the idea of protective sex as a measure of avoiding "sinful" abortions but frowns seriously on masturbation and covetousness. Deducing from Collins et al., (2002), it is possible that sex education could be handled effectively and with ease in the schools. However, it is worth noting that the Catholic Church is vehemently against the use of condoms.

In relation to the religious affiliation, the Christian religion was the main religion of the key informants (N=16, 84.2%) as indicated in Table 4.3b. The remaining (N=3, 15.8%) of the key informants were from the Islamic faith.

Table 4. 3b: Religious Affiliation of Key Informants

Key Informants	Religion		
	Christianity (%)	Islam (%)	Total (%)
Parents	52.6. (10)	0 (0)	52.6 (10)
Teachers	15.8 (3)	15.8 (3)	31.6 (6)
Health workers	15.8 (3)	0 (0)	15.8 (3)
Total	**84.2 (16)**	**15.8 (3)**	**100 (19)**

Source: Author's field survey, 2012

A large proportion of both categories of respondents: core (N=292, 89.6%) and key informants (N=16, 84.2%) were Christians. This suggests that policy interventions and programmes in relation to sex education may not face serious resistance as the Christian religion is seen as less rigid and highly adaptable to societal change (Collins et al., 2002).

4.1.4 Residential Patterns of Core Respondents

Monitoring of adolescents especially in-school adolescents will undoubtedly have a positive influence on their sexual behaviour. The effectiveness of the monitoring exercise is dependent on the residential patterns of the in-school adolescents. In this regard, the study sought to find out the residential patterns of the respondents in secondary schools.

The results showed that majority (N=245, 75.2%) of respondents were in boarding houses and (N=5, 2.1%) of them were in rented apartments (Table 4.4).

Table 4.4: Residential Patterns of Core Respondents

Residential Patterns	Frequency	Percent
Day	59	18.1
Boarding	245	75.2
Students Hostel	17	5.2
Rented Apartments	5	2.1
Total	**326**	**100**

Source: Author's field survey, 2012

It could be inferred from the results of the residential patterns of the respondents that the accommodation facilities are not enough to meet the growing needs of the student population in our second cycle institutions. This notwithstanding, the study revealed that the residential accommodation of second cycle institutions is in consonance with government policy where most of the students are supposed to be given boarding status and very few students given day status.

The results suggest that as in-school adolescents live in rented apartment and student hostels, they could not be controlled by school authorities after instructional hours because issues like going for preps, observing siesta and attending all social gatherings are optional to them. This situation could contribute to deviant behaviours such as premarital sex with its associated problems such as unwanted pregnancy, unsafe abortions and sexually transmitted infections.

4.1.5 Current level of Education of Students

Sundaram et al., (2011) found that factors such as level of education, wealth and place of residence could influence one's sexual behaviour. It is in this regard that the current level of education becomes critical in this study.

From Table 4.5, it revealed that majority (N=194, 59.5%) of the respondents were in SHS1 and SHS2 and the least number of respondents were in SHS4 representing (N=57, 17.5%).

Table 4.5: Current level of Education of Core Respondents

Level of Education	Frequency	Percent
SHS1	98	30.1
SHS2	96	29.4
SHS3	75	23.0
SHS4	57	17.5
Total	**326**	**100 (99.98)**

Source: Author's field survey, 2012

The large numbers in SSS1 and SHS2 in this study might be due to the fact that the respondents have not yet gone on transfer or they were not adequately prepared academically to sit for the November/December West African Senior School Certificate Examination (Nov/Dec WASSCE) to enable them leave for higher institutions. The results suggest that any educational programmes and activities designed in relation to sex education, most of the activities or much of the information should target first and second years and scale up in the third and fourth year. This is because the student population begin to reduce as they move to the third and forth years.

4.1.6 Family Structure of Core Respondents

Parental co-residence is very important in shaping the lives of adolescents. The presence of both parents is very likely to instill and maintain good discipline which will in turn influence adolescents' sexual behaviour. It is in the light of this that the respondents were asked to indicate their living arrangements.

In the study the investigations showed that most (N=184, 56.4%) of the respondents were from intact families thus, they live with both biological parents. However, there were few students (N=20, 6.1%) who lived with other persons other than their biological fathers and mothers.

Table 4.6: Family Structure of Core Respondents.

Living Arrangement of Respondents	Frequency	Percent
Mother only	104	31.9
Father only	18	5.5
Both parents	184	56.4
Brothers, aunties & grand parents	20	6.1
Total	**326**	**100.0**

Source: Author's field survey, 2012

Based on the results, it can be inferred that there was relatively marriage stability in the region as majority of the in-school adolescents lived with both biological parents.

Empirical evidence of the relationship between parental co-residence and sexual activity generally show a negative relationship. Thus, co- residence is associated with a lower likelihood of being sexually-experienced (Ngom et al., 2003 as cited in Kumi-Kyereme et al., 2007).

4.1.7. Current Place of Residence during Vacation

Current place of resident in this study is very crucial because research indicates that the place of residence greatly influence one's sexual behaviour. For instance, according to Sundaram et al., (2011), sexual behaviours such as premarital sex and first abortions were found among those living in urban areas. It is in relation to this that the study sought to find out the places in which the adolescents live during vacation.

The investigations in the present study indicated that whereas majority (N=216, 66.3%) of the respondents stay in the Ashanti-Kumasi, very few (N=110, 33.8%) of the students stayed in the other regions as shown in Table 4.7.

Table 4.7: Current Place of Residence during Vacation

Place of Residence During Vacation	Frequency	Percent
Ashanti Region	216	66.3
Volta Region	4	1.2
Greater Accra Region	25	7.7
Upper East Region	1	.3
Central Region	8	2.5
Eastern Region	12	3.7
Western Region	31	9.5
Brong Ahafo Region	26	8.0
Northern Region	3	.9
Total	**326**	**100.0**

Source: Author's field survey, 2012

The results from the study suggest that the parents or guardians of these adolescents stay and work in the Ashanti region or most of them (adolescents) come from the Ashanti region. Perhaps, the in-school adolescents remain in the metropolis to be able to attend vacation classes which have indirectly become part and parcel of the academic calendar.

4.2 Kinds of Sex Educational Programmes

One of the core issues explored in the study was to discover from core respondents the kinds of sex educational programmes available to them in the schools aim at protecting them from risky sexual behaviours and thereby promoting healthy sexual life among young people. Additionally, for more and in-depth information, three Focused Group Discussions (FGDs) were conducted among the in-school adolescents who did not take part in answering the questionnaire.

The key informants were also asked to identify the kinds of sex educational programmes they have been discussing with adolescents or have ever discussed with adolescents in their roles as agents of socialization and as their professional duties require of them. The responses from the key informants were to confirm or reject what the core respondents might have said.

The kinds of sex educational programmes identified were: abstinence from sex education/abstinence-only, sex resistance skills and contraceptive-based sex education.

4.2.1: Abstinence from Sex/ Abstinence-only Sex Education

In examining whether respondents have attended lessons in the school on abstinence from sex or not. The data from Table 4.8a, showed that the majority (N=288, 88.3%) of them have attended lessons on abstinence from sex in the school. However, (N=38, 11.6%) of them did not attend any lesson on the said topic in the school.

Table 4. 8a: Abstinence from Sex Education

Abstinence from Sex	Frequency	Percent
Yes	288	88.3
No	35	10.7
Church	3	.9
Total.	**326**	**100 (99.9)**

Source: Author's field survey, 2012

The observation that about twelve percent (N= 38, 11.6%) of the students who did not attend lectures on abstinence from sex in the school presupposes that those students were absent during such lessons.

Responses from the key informants indicated that majority (N=16, 84. 2 %) of them either taught or discussed abstinence from sex with adolescents as compared to (N=3, 15.8 %) who did not.

Table 4. 8b: Abstinence from Sex Education

Key Informants	Abstinence from Sex Education		
	Yes (%)	No (%)	Total
Parents	42.1 (8)	10.5 (2)	52.6 (10)
Teachers	31.6 (6)	0 (0)	31.6 (6)
Health workers	10.5 (2)	5.3 (1)	15.8 (3)
Total	**84.2 (16)**	**15.8 (3)**	**100 (19)**

Source: Author's field survey, 2012

This finding corroborated a previous study by Collins et al., (2002) which found that abstinence-only sex education was the most preferred choice. The researchers reported that abstinence-only education was preferable because it lacks verbalization and provides only instructions and warnings. However, it sometimes employs scare tactics.

Though the most preferred choice, the study revealed that the programme has negative effects on its beneficiaries. For instance, in a Focused Group Discussion (FGD) with the respondents this was what two participants had to say:

"Some people masturbate because they are told to abstain from sex at the church. The pressures they suffer from not having sex compel them to masturbate".

--Male Student (Boys only FGD)

"Some people even end up by having sex with animals especially dogs because they have been told to abstain from sex by their parents and pastors".

--Male Student (Boys only FGD)

Also, the study found that abstinence from sex education does not address the challenges (physical, emotional development needs) facing adolescents but rather its teachings are based on moral and spiritual grounds. For instance in a Focused Group Discussion (FGD) with the respondents, a participant had this to say:

"We were told not to have sex or else we lose our blessings from God"

--Female student (Girls only FGD)

This finding is in consonance with earlier findings by Brewer et al., (2007) who reported that abstinence-only sex education imposes guilt for feelings experienced during normal sexual development. This is because in place of medically accurate facts, its teachings are based on unsupported assumptions and moral platitudes that do not address the physical, social and emotional development needs of youths. Therefore, Brewer et al., (2007) concluded that

abstinence-only education programmes not only fail in their goals but also fail to meet the needs of youths and young adults.

The findings of this study suggest that the core respondents were denied of very crucial information that could help promote and maintain healthy sexual youth. Any risky sexual adventure of adolescents could partially be blamed on the agents of socialization.

4.2.2: Sex Resistance Skills

In furtherance of finding out how the core respondents were taught to refuse pressures from peers to have sex or engage in risky sexual activities and thereby promoting healthy sexual life, they were asked whether they have ever attended a lesson in the school on sex resistance skills.

Table 4.9a showed that majority (N=265, 81.3%) of the student respondents had attended a lesson in the school on sex resistance skills education while (N=59, 18.1 %) indicated that they did not attend a lesson in the school on sex resistance skills education. The data further indicated that about one percent (N=2, .6%) of the student respondents have acquired information concerning sex resistance skills from the radio.

Table 4.9a: Sex Resistance Skills Education

Sex Resistance Skills	Frequency	Percent
Yes	265	81.3
No	59	18.1
Radio	2	.6
Total	**326**	**100.0**

Source: Author's field survey, 2012

The results from Table 4.9b indicate that majority (N= 13, 68.5%) of the key informants did not discuss sex resistance skills with the adolescents while (N= 6, 31.5%) percent of them did hold discussions on the said topic with adolescents.

Table 4.9b: Sex Resistance Skills Education

Key Informants	Sex Resistance Skills Education		
	Yes (%)	**No (%)**	**Total (%)**
Parents	21.1 (4)	31.6 (6)	52.6 (10)
Teachers	10.5 (2)	21.1(4)	31.6 (6)
Health workers	0 (0)	15.8 (3)	15.8 (3)
Total	**31.6 (6)**	**68.5 (13)**	**100 (19)**

Source: Author's field survey, 2012

The responses from the key informants presuppose that adults do not either feel comfortable discussing sexual matters with young persons or fear that exposing adolescents to sex resistance skills will rather encourage them to engage in premarital sex.

It is worth noting that this probable reservation expressed by the key informants has been found to be consistent with previous research findings. For instance, several studies have found that exposure to sex education is associated with first intercourse at earlier ages and greater contraceptive use (Dawson 1986; Ku et al., 1992, 1993; Marsiglio & Mott, 1986 as cited in Sabia, 2006).

At a Focused Group Discussion, it was further affirmed by the core respondents that they have attended lectures on sex resistance skills education in the school as two of the participants indicated:

"Yes, we have attended lectures on sex resistance skills in the school. It was a pastor who gave such a talk. He laid emphasis on how to abstain from all sexual related activities by reading your Bible, drawing closer to God and choosing the right kind of friends"

--Male students (Boys & Girls FGD)

"They came to tell us some time ago that we should avoid boy friend /girl friend relationships; we should not watch pornographic movies. Finally, we should avoid reading pornographic materials (books, magazines) because these things would induce us to initiate sex"

--Female students (Boys & Girls FGD)

Deducing from the quotes, it could be suggested that some school authorities were innovative and therefore invited resource persons to empower the respondents with knowledge and life skills to avoid sex or resist pressures of engaging in risky sexual adventures.

4.2.3 Contraceptive –Based Sex Education/Comprehensive Sex Education

On the issue of investigating whether in-school adolescents have been provided with information on how to protect themselves from high risk sexual behaviours like unprotected sex, they were asked whether they have ever attended a lesson on contraceptive–based sex education/comprehensive sex education in the school or not.

The investigations indicated that about (N= 205, 62.9%) of the core respondents attended lessons on contraceptive- based sex education in the school as compared to (N=114, 35.0%) who did not.

It was only (N=7, 2.1%) of them who attended a lesson on contraceptive-based sex education at a church camp out programme.

Table 4.10a: Contraceptive-Based Sex Education

Contraceptive –Based Sex education	Frequency	Percent
Yes	205	62.9
No	114	35.0
Church camping	7	2.1
Total	**326**	**100**

Source: Author's field survey, 2012

As indicated in table 4.10b, the study revealed that majority (N=15, 79%) of the key informants have not held discussions on contraceptive use with adolescents in the socialization process while only (N=4, 21.1%) had discussed contraceptive-based sex education with the adolescents.

Table 4. 10b: Contraceptive-Based Sex Education

Key Informants	Contraceptive-Based Sex Education		
	Yes (%)	No (%)	Total %
Parents	5.3 (1)	47.4 (9)	52.6 (10)
Teachers	15.8 (3)	15.8 (3)	31.6 (6)
Health workers	0 (0)	15.8 (3)	15.8 (3)
Total	**21.1 (4)**	**79.0 (15)**	**100 (19)**

Source: Author's field survey, 2012

The results from both the core respondents and the key informants presuppose that only a few of the key informants might have educated the majority of the core respondents on contraceptive – based sex education.

In a Focused Group discussion, varied responses were given in different schools in respect of the contraceptive-based sex education. For instance, an adolescent boy in a mixed school indicated that he has been educated on contraceptive use but back in the Junior High School (JHS):

"Yes, we were taught how to use contraceptives such as the condom but it was back at JHS in Cape Coast"

*--Male student (*Boys & Girls *FGD)*

In another school, it was revealed that abstinence from sex education was common and preferred one as compared to contraceptive based-sex education. This is how an adolescent boy puts it:

"No, it is mostly stay away from sex but the use of contraceptives is never mentioned in Ghana"

--Male student (Boys only FGD*)*

From the quotes, it could be inferred that the concept of contraceptive-based sex education is not uniformly organized for in-school adolescents. It varies from school to school and from region to region. The results further suggest that there would be a knowledge gap among the core respondents in the country as some were given comprehensive information while others were denied such pieces of information.

4.3 Sources of Sex Related Information

It is assumed that sources of sex-related information might have the propensity to influence the sexual behaviour of in-school adolescents. This influence could be positive or negative depending on the information source, be it interpersonal or media sources. It is in the light of this that the study sought to find out the interpersonal and media sources from whom and from where in-school adolescents obtain sex-related information. The key informants were also asked to

express their views on the interpersonal and media sources from whom and from where they thought the adolescents mostly obtain sex-related information. The results from both categories of respondents are discussed below.

4.3.1 Interpersonal Sources of Adolescents Sex-related Information

The persons from whom sex-related information is obtained could produce two possible effects on the beneficiaries. First, the information source could reduce risky behaviours associated with sex and second, it could further expose the beneficiaries of this information to high risky sexual behaviours depending on how knowledgeable the provider is. It is in view of this that the in-school adolescents were asked to indicate the persons from whom they (adolescents) mostly obtain their information concerning sex.

The results indicated that (N=128, 39.3%) of the core respondents obtain their information on sex from peers/friends and (N=115, 35.3 %) obtain theirs from parents. However, (N=4, 1.2%) of the core respondents get their information on sex education from other sources such as preacher men or pastors (Table 4.11a).

Table 4.11a: Adolescents' Interpersonal Sources of Sex Information

Persons	Frequency	Percent
Parents	115	35.3
Teachers	43	13.2
Health workers	30	9.2
Peers/Friends	128	39.3
Family members	6	1.8
Preacher men/pastors	4	1.2
Total	**326**	**100.0**

Source: Author's field survey, 2012

From the data, it can be observed that adolescents discussed sex-related matters in a particular order: peers first, followed by parents, teachers etc. This pattern presupposes that the adolescents were more comfortable in discussing sexual matters with these persons in order of trust. Thus, family members and pastors were the last resort but peers were the first group of persons to consult in matters relating to sex education. The revelation that parents were consulted after the peers, again suggests that parents were contacted to confirm or reject whatever their peers might have said.

At a Focused Group Discussion (FGD), it was revealed that students preferred to obtain sex-related information from their peers as a participant summed it up this way.

"I enjoy discussing about sex with my peers much better than my parents" (Why not your parents the researcher wanted to find out?). She burst into laughter and finally said *"it's alright"*

--Female Student (Boys & Girls GFD)

In the opinion of the key informants, in-school adolescents obtain sex- related information from different persons. Table 4.11b presents the views of the key informants on the said topic. From the table, (N=9, 47.4%) of them were of the view that adolescents obtain sex-related information from their peers/friends as compared to (N=2, 10.5%) of them who were of the view that teachers were the least sources of sex information for adolescents.

Table 4.11b: Key Informants Expressing Opinions on Interpersonal Sources of Adolescents Sex-Related Information

	Opinions			
Key Informants	**Parents (%)**	**Teachers (%)**	**Peers/Friends (%)**	**Total (%)**
Parents	21.1 (4)	10.5 (2)	21.1 (4)	52.6 (10)
Teachers	21.1 (4)	0 (0)	10.5 (2)	31.6 (6)
Health workers	0 (0)	0 (0)	15.8 (3)	15.8 (3)
Total	**42.2 (8)**	**10.5 (2)**	**47.4 (9)**	**100 (19)**

Source: Author's field survey, 2012

The results from both core and key informants indicate that the adolescents mostly obtain information from their peers/friends. This finding corroborated earlier studies by Sutton (2008) and Gould & Mazzeo (2012) which found that adolescents prefer to obtain sex-related information from peers or friends.

In affirming the finding that peers were the most preferred interpersonal sources of sex information for adolescents, DiClemente (1993) as in Mason (2003) and Kumi-Kyereme et al., (2007) have argued that adolescents often find peer sex educators more credible than adults. The peers are seen to be sympathetic and ready to listen as such the peers serve as role models to the adolescents in relation to sex education.

The patterns observed from the responses of both categories of respondents suggest that the other information sources were not necessarily preferred sources but may be due to the occupation of the information provider. This is because teachers and health workers may have provided the information on sex education in the discharge of their duties. For instance, teachers handling subjects like Social Studies, Integrated Science and Biology are compelled to provide sex-related information. In affirming this in a Focused Group Discussion one of the participants had this to say:

*"We were learning about adolescent reproductive health and she (*Social Studies Teacher*)*

mentioned the family planning in a passing".

--Female student Girls only (FGD)

4.3.2 Adolescents' Media Sources of Sex Information

It is equally pertinent to note that the media sources of adolescents' sex- related information could either reduce or expose the beneficiaries to risky behaviours associated with sex. The benefits or dangers emanating from these media sources are further enhanced depending on the accuracy of the information. It is based on this that in this study, the researcher sought to ask respondents to rank the places where they mostly get their information concerning sex education.

The results in the study indicated that about fifty percent (N=162, 49.7%) reported having obtained their information on sex from the internet. It was only (N=8, 2.5 %) of the student respondents who indicated reading of pornographic materials as their sources of sex-related information (Table 4.12a).

Table 4.12a: Adolescents' Media Sources of Sex Information

Media Sources	Frequency	Percent
Internet	162	49.7
Television	107	32.8
Newspapers	15	4.6
Radio	34	10.4
Reading of pornographic materials	8	2.5
Total	**326**	**100.0**

Source: Author's field survey, 2012

It could be suggested from the data that there are a lot of sex-related information on the electronic media more especially on the internet and television and this information seems to be easily accessible to the adolescents (Table 4.12a).

Table 4.12b showed the media sources from where the key informants thought adolescents mostly obtain sex-related information. About (N=8, 42.1%) of the key informants were of the view that adolescents obtain sex information from the internet while only (N=2, 10.5%) percent indicated radio as a source of sex-related information.

Table 4.12b: Key Informants Expressing Opinions on Adolescents Media Sources of Sex-related Information

Key Informants	Opinions on Media Sources				
	Internet (%)	Television (%)	Radio (%)	Newspapers %	Total (%)
Parents	15.8 (3)	26.3 (5)	10.5 (2)	0 (0)	52.6 (10)
Teachers	26.3 (5)	5.3 (1)	0 (0)	0 (0)	31.6 (6)
Health workers	0 (0)	0 (0)	0 (0)	15.8 (3)	15.8 (3)
Total	**42.1 (8)**	**31.6 (6)**	**10.5 (2)**	**15.8 (3)**	**100 (19)**

Source: Author's field survey, 2012

The investigations from both the core respondents and key informants showed that the most preferred place of obtaining sex-related information was the internet. This implies that the internet for that matter technology could be used to improve and advance the social life of the next generation as well as become a threat to some of the cherished values of society; abstinence from sex until marriage.

The internet as a major source of sex-related information was further echoed during the Focused Group Discussion, when an adolescent boy indicated how he normally uses the internet and his mobile phone to get information on sex. He said:

"I mostly get the information from the internet. I have an application on my phone that tells you that at this time the girl can get pregnant or the girl is free"

--Male student (Boys only FGD)

When the researcher asked for more information on how he uses the internet to obtain information on sex, he indicated that:

"Ok, it is an application I download from the internet onto the mobile phone. I then check on the phone which indicates that this time my girl friend is free or this time she is in her period"

--Male student (Boys only FGD)

The results further suggest that sex education could effectively be taught through the use of technology because the youth has the flair for technology especially the use of the internet.

4.4 Sexual Behaviour

It has been established that sexual behaviour can be an important determinant of basic health, both during adolescence and later in adulthood (Lylod, 2007). To this effect, a series of questions were asked concerning sex initiation, contraceptive use and number of sexual partners. This was to find out whether sex education could have any influence on the beneficiaries' (adolescents) sexual behaviour.

4.4.1 Sex Initiation

Research has shown that initiating sex at a younger age is positively associated with increased lifetime number of sexual partners and consequently, increased chances of infection with HIV and STIs (Gueye et al., 2001 as cited in Bankole et al., 2007). It is in the light of this that the in-school adolescents were asked whether they were sexually experienced.

The results in this study showed that more than half, (N=164, 50.3%) of the in-school adolescents reported that they were sexually active at the time of the study while (N=162, 49.7%) have never had sex (see Table 4.13).

Table 4.13: Adolescents who have ever had Sexual Intercourse

Sex Initiation	Frequency	Percent
Yes	164	50.3
No	162	49.7
Total	**326**	**100**

Source: Author's Field survey, 2012

In a response to the same question in a Focused Group Discussion with the adolescents, one of the participants had this to say:

"Yes, some of us, I mean people in our mist here are "service women" (sexually active boys) that is they have had sex before".

--Male student (Boys only FGD)

In support of the fact that the withdrawal method during sexual intercourse is not hundred percent safe, this is what a participant had to say:

"In my opinion, the withdrawal method is not easy because before ejaculation you yourself will become dead. I don't think that the withdrawal method will work because when you are about to ejaculate that is the time you will feel well. It is not 100 percent safe to use the withdrawal method to prevent unwanted pregnancies"

--Male student (Boys Only FGD)

4.4.2 Persons with whom Adolescents' Have Had Sexual Intercourse

The persons with whom the in-school adolescents might have had sex could determine whether they engage in safer sex or unprotected sex. For instance, if it is an authority figure or a close

relative, the power dynamics may be different from if it is a peer. In view of this, the study sought to find out the persons with whom the in-school adolescents mostly have sex.

The data showed that (N=128, 39.3%) of the sexually active adolescents have reported having had sex with their peers/friends. Whereas (N=36, 11%) of the sexually active adolescents testified having had sex with teachers and closed relatives, (N=162, 49.7%) indicated that they never had sex (Table 4.14).

Table 4.14: Persons with whom Adolescents' Have Had Sexual Intercourse

Persons	Frequency	Percent
Peers/friends	128	39.3
Teachers	23	7.1
Closed relatives	13	4.0
Never had sex	162	49.7
Total	**326**	**100.0**

Source: Author's Field survey, 2012

The revelation that the sexually active adolescents mostly have sex with their peers presupposes that peer sexual partners could exert great influence on each other. This influence could either be positive or negative.

4.4.3 Age of First Sexual Intercourse

It has been found that initiating sex at a younger age is positively associated with increased lifetime number of sexual partners and consequently, increased chances of infection with HIV and STIs (Gueye et al., 2001 as cited in Bankole et al., 2007). It is in the light of this that in this study, the in-school adolescents were asked to indicate the age of their first sexual encounter.

The results from Table 4.15 showed that (N=89, 27.3%) of them had their first sexual intercourse between the ages of 17 and 19 while (N=7, 2.2%) of them indicated that they had their first sexual intercourse from 20 years and more.

Table 4.15: Age at First Sexual Intercourse

Age	Frequency	Percent
Below 12 years	11	3.4
Between 13 and 16 years	57	17.5
Between 17 and 19 years	89	27.3
20 years and above	7	2.2
Never had sex	162	49.7
Total	**326**	**100**

Source: Author's field survey, 2012

From the data it means that a large proportion (N= 157, 48.2%) of the sexually active adolescents have had their first sexual intercourse below twenty years. This presupposes that the sex educational programmes are producing mixed results that are both positive and negative.

One other interpretation of this is that the content and the delivery of the sex educational programmes are organized in such a way that the adolescents have mastered all the dangers involved in sex hence they initiate sex at an earlier age without fear of being victims to the sex-related consequences: unwanted pregnancies and sexually transmitted infections. On the other hand, it could also mean that the organization of the sex educational programmes is not well executed in terms of content and delivery as such the desired impact is not felt or is not reflecting positively in their sexual lives.

The results suggest that early sex initiation is still a social phenomenon that needs an integrated intervention from parents and other social institutions such as the school and the religious bodies

to be able to encourage young people to delay sex and initiate it after 20 years or after Senior High School.

4.4.4 Reasons for Respondents First Sexual Intercourse

There is a reason for every social action. In this regard, the in-school adolescents were asked to provide the reason(s) for their first sexual intercourse.

The results revealed that more than half of the sexually experienced adolescents (N= 94, 28.8%) of them wanted to show love to their partners while (N=10, 3.1%) had sex due to peer influence, curiosity and feelings for sex (see Table 4. 16).

Table 4.16: Reasons for Respondents' First Sexual Intercourse

Reasons	Frequency	Percent
Show love to my partner	94	28.8
Forced to have sex	40	12.3
Exchange for gift	20	6.1
Peer influence, curiosity and feelings for sex	10	3.1
Never had sex	162	49.7
Total	**326**	**100.0**

Source: Author's field survey, 2012

4.5 Contraceptive Use

With an increasing spread of HIV/AIDS and other sexually transmitted infections, it becomes imperative that the appropriate contraceptives are used to promote healthy sexual life. It is against this background that a series of questions were asked to find out what sexually active student respondents use to prevent unwanted pregnancies and sexually transmitted infections.

4.5.1 Methods Respondents used in Preventing Unwanted Pregnancy

According to Braeken et al., (2010) up to 4.4 million girls aged 15–19 seek abortion – the majority of which are unsafe. In addition, in-school adolescents might be aware that an unwanted pregnancy can interfere with their education. In view of this, they were asked to indicate what they did or their sexual partners did to prevent pregnancy in their first sexual intercourse.

From Table 4.17, it indicated that (N=162, 49.7%) of the respondents testified that they have never had sexual intercourse at the time of the study, while (N=1 .3%) said they used the rhythm method to prevent pregnancy during their first sexual intercourse.

Table 4.17: Methods Respondents Used to prevent unwanted Pregnancy during first Sexual Intercourse

Methods	Frequency	Percent
Used condom	90	27.6
Did nothing	59	18.1
Oral contraceptive	14	4.3
Rhythm	1	.3
Never had sex	162	49.7
Total	**326**	**100.0**

Source: Author's Field survey, 2012

From the data, it means that out of the (N=164, 50.3 %) who were sexually active, more than half (N=104, 31.9%) used contraceptives to prevent unwanted pregnancies. This presupposes that the contraceptive-based sex education though not the most popular kind in the study area, it is creating a positive impact on the adolescents for they engage in protected sex.

In a Focused Group Discussion, it was revealed that sexually active in-school adolescents preferred unprotected sex to protected sex and when they used contraceptives, it is aimed at preventing pregnancy only. Some of them would use other methods such as withdrawal to prevent pregnancy. The statements from two of the male students reflect the views expressed.

"I don't like using condom because, "condom de bore me". It is like a rubber so you don't enjoy sex when you are using it. I prefer raw that is flesh to flesh but the girl should take oral contraceptives to prevent any pregnancy"

--Male Student (Boys only FGD)

"I will apply coitus interruptus that is withdrawing the penis from the vagina before ejaculation"

--Male Student (Boys & Girls FGD)

One of the implications of the statements is that sexual pleasures outweigh any health risk involved in unprotected sexual encounter. It also presupposes that the current sex education is out of touch with the emotional needs of the adolescents.

The observations further suggest that use of methods such as rhythm, withdrawal and use of oral contraceptives means that adolescents were interested in preventing unintended pregnancy as against preventing sexually transmitted infections. This stems from the non-use of condoms during sexual intercourse.

4.5.2 Methods Respondents Used to Prevent STIs during First Sexual Intercourse

Every year, at least 111 million new cases of curable sexually transmitted infections (STIs) and half of all new HIV infections occur among young people (Braeken et al., 2010). In this regard,

the in-school adolescents were asked to indicate what they used to prevent sexually transmitted infections during their first sexual intercourse.

The results in this study showed that (N=162, 49.7%) of them have never had sex while (N=65, 19.9%) did nothing to prevent sexually transmitted infections during their first sexual intercourse as indicated in Table 4.18.

Table 4.18: Methods Respondents Used to Prevent STIs

Methods	Frequency	Percent
Used Condom	99	30.4
Did Nothing	65	19.9
Never Had Sex	162	49.7
Total	**326**	**100**

Source: Author's field survey, 2012

The data showed that for the (N=164, 50.3%) of the respondents who were sexually active, more than half (N=99, 30.4%) of them used condom with the aim of preventing sexually transmitted diseases. This implies that the respondents are appreciating the contraceptive-based sex education which is aimed at promoting healthy sexual life.

In a response to what they did to prevent sexually transmitted infections (STIs) in their first sexual intercourse in a Focused Group Discussion, this is what one of the participants had to say:

"You should know your partner. In the first place, you should know all your partners but you should not go for prostitutes because using condom during sexual intercourse is like taking toffee with the wrapper. It is does not make sex pleasurable.

--Male Student (Boys & Girls FGD)

It could be suggested from the statement that sexual pleasures outweigh the health and social implications of unprotected sex. The results further suggest that those who were sexually active engaged in risky sexual behaviours such as non-use of contraceptives especially condoms to prevent STIs in the mist of the wide spread of HIV/AIDS.

4.5.3 Methods Respondents used to prevent unwanted Pregnancy in their Recent Sexual Intercourse

With high incidence of unwanted pregnancies leading to maternal deaths as a result of unsafe abortions, in-school adolescents were asked to indicate what they used or their partners used to prevent pregnancy in their recent sexual intercourse.

From Table 4.19, it showed that (N=162, 49.7%) of the respondents have never had sex while only (N=5, 1.5%) of them used the rhythm method to prevent unwanted pregnancy.

Table 4.19: Methods Respondents used to Prevent Pregnancy in their Recent Sexual Intercourse

Methods	Frequency	Percent
Used Condom	94	28.8
Did nothing	32	9.8
Oral contraceptives	33	10.1
Rhythm	5	1.5
Never had sex	162	49.7
Total	**326**	**100.0**

Source: Author's Field survey, 2012

From the data on Table 4.19, it implies that the (N=164, 50.3%) of the in-school adolescents who were sexually active, about twenty two (N=70, 21.4%) of them engaged in unprotected sex and high risky sexual acts. The observation that about (N=94, 28.8%) of the in-school adolescents used condoms to prevent unwanted pregnancies in their recent sexual encounters presupposes that there is a positive change in their sexual behaviour but the change is gradual.

In a response to the same question in a Focused Group Discussion, the responses were varied in terms of gender. For instance, in the Girls-only Focused Group Discussion, most of the responses have to do with oral contraceptives or condom use as indicated below.

"The best is to abstain from sex but if you cannot abstain, then use condom or other contraceptives when you are ready to have sex"

--Female Student (Girls only FGD)

It could be suggested from the statement that because condom has a dual protection capacity (prevention of unwanted pregnancy and STIs) that explains why the girls were pushing for contraceptives use specifically the condom because they tend to suffer most if there is any inconvenience like an unintended pregnancy.

The boys however, have different pereception about the use of condom in particular as one of the participants had this to say:

"Oh! No, the use of condom de bore me. Oh, Yeah! It is true. Having sex should be raw that is flesh to flesh but the girl should take oral contraceptives to prevent pregnancy. This is because the condom is like a rubber so you don't feel it or it doesn't make sex very pleasurable at all"

--Male student (Boys –only FGD)

This finding supports an earlier study by Sossou, (2007) who found that men prefer sex without condom. They want it "flesh to flesh". This suggests that, men's sexual pleasure outweighs any health risks involved in unprotected sex.

4.5.4 Methods Respondents used to Prevent STIs in Recent Sexual Intercourse

The personal and social cost of unprotected teenage sexual behaviour are numerous and they include: STIs with attendant social and economic consequences, pelvic inflammatory disease, which is often the consequence of an untreated or improperly treated STIs and infertility (Collins et al., 2002). In this regard, contraceptive use was explored with the in-school adolescents to indicate what they used or their partners used to prevent STIs in their recent sexual intercourse.

The results from the study showed that (N=162, 49.7%) of the respondents have never had sex and (N=55, 16.9%) of the respondents did nothing to prevent sexually transmitted infections in their recent sexual encounter (Table 4.20).

Table 4. 20: Methods Respondents used to Prevent STIs in Recent Sexual Intercourse

Methods	Frequency	Percent
Use condom	109	33.5
Did nothing	55	16.9
Never had sex	162	49.7
Total	**326**	**100**

Source: Author's Field survey, 2012

From the table, it implies that for the (N=164, 50.3%) of the sexually active adolescents more than half (N=109, 33.5 %) used condoms in their recent sexual encounter to prevent STIs. This observation therefore suggests that sex education especially contraceptive-based education is

gradually making a change in the adolescents' sexual behaviour. Generally, the data from the Table 4.20 suggest that a large proportion of the respondents (N= 271, 83.2%) were appreciating the abstinence from sex and contraceptive-based sex education as such they were behaving accordingly as compared to (N= 55, 16.9%) who did not appreciate the teachings of the sex educational programmes.

At a Focused Group Discussion, it was revealed that male adolescents preferred unprotected sex and they have advanced reasons for such actions.

"You don't need to use condoms. What is important in the first place is that you should know all your sexual partners. However, you should not go in for prostitutes"

--Male student (Boys Only FGD)

From the quote, it could be suggested that contraceptive use especially condom is not a preferred choice but rather unprotected sex popularly known as flesh to flesh. This behaviour suggests that in spite of the teachings of sex education, there has not been any remarkable behavioural change in relation to sexual behaviour.

In a summary, an examination of the methods respondents used to prevent unwanted pregnancies and STIs in both their first and recent sexual encounters, it appears there is a change in behaviour but the change is not great but rather gradual. For instance, whereas (N=90, 27.6% and N= 94, 28.8%) of the respondents used condom to prevent unwanted pregnancy in their first and recent sexual encounters respectively and (N=99, 30.4% and N=109, 33.5%) of them used condom to prevent STIs in their first and recent sexual encounters respectively.

The former recorded 1.2 percent increase in condom use to prevent unplanned pregnancies and the latter 3.1 percent increase in condom use to prevent sexually transmitted infections.

4.6 Sexual Partners

The phenomenon of having multiple sexual partners has the propensity to expose the actors involved to sexually transmitted infections. It is in the light of this that the issue of multiple sexual partners was very crucial in this study. The study examined the number of sexual partners in-school adolescents might have had in the last 12 months and their life time sexual partners.

4.6.1 Number of Sexual Partners in the Last 12 Months

It has been established that initiating sex at a younger age is positively associated with increased lifetime number of sexual partners and consequently, increased chances of infection with HIV and STIs (Gueye et al., 2001 as cited in Bankole et al., 2007). In view of this, in-school adolescents were asked to indicate how many different people they have had sex with in the last twelve (12) months?

The results of this study showed that (N=162, 49.7%) of the respondents have never had sex and (N=41, 12.6%) of them had only two or more sexual partners in the last twelve months (Table 4.21).

Table: 4. 21: Number of Sexual Partners in the last 12 Months

Number of Sexual Partners	Frequency	Percent
One	82	25.2
Two	41	12.6
Three and above	41	12.6
Never had sex	162	49.7
Total	**326**	**100.0**

Source: Author's field survey, 2012

From the table, it is important to note that among the (N=164, 50.3%) of the sexually experienced adolescents, half (N=82, 25.2 %) of them have had only one sexual partner in the last twelve months while the remaining half (N=82, 25.1%) have had multiple sexual partners. The finding that majority (N=164, 50.3%) of them were sexually experienced suggests that the current sex education especially abstinence and resistance skills are not effective and as such not yielding the desired impact on the adolescents. Thus, in spite of the provision of sex education, they are not able to abstain or resist the pressures of having sex.

The responses at the Focused Group Discussion showed that some of the in-school adolescents have multiple sexual partners. One of the major reasons for having multiple sexual partners is that they are exploring for better partners as two of the participants had this to say:

"Some of us have more than five sexual partners. The highest number of sexual partners is seven (7)"

--Male student (Boys only FGD)

"You see, some girls are heartless and can give you broken heart so you are just trying them"

--Male student (Boys only FGD)

By deductive implication from the quote, perceived infidelity is one of the contributing factors to the phenomenon of having multiple sexual partners among the in-school adolescents.

4.6.2 Number of Life Time Sexual Partners

The age at first sexual intercourse is important because early sex initiation is predictive of the number of lifetime sexual partners (Morris et al., 1993). It is in view of this that in the study, the number of lifetime sexual partners was explored by asking respondents to indicate the number of different people they have ever had with.

The results in the study showed that (N=162, 49.7%) of them have never had sex while (N=104, 31.9%) of them have had two sexual partners at the time of the survey (Table 4.22).

Table 4.22: Number of life Time Sexual Partners

Sexual Partners	Frequency	Percent
One	60	18.4
Two	34	10.4
Three and above	70	21.5
Never had sex	162	49.7
Total	**326**	**100**

Source: Author's field survey, 2012

From the table, it implies that half (N=164, 50.3%) of the sampled population was sexually experienced. Out of the fifty percent who were sexually active, more than half (N=104, 31.9%) have had at least two sexual partners. The pattern observed suggests that even though the respondents have received lessons on sex education, their sexual behaviour is not reflective of

the expected outcome especially where about thirty-two percent of the sexually active adolescents have had two or more sexual partners at the time of the study.

In responding to the same question at a Focused Group Discussion, one of the participants indicated that it is not one's intention to have multiple sexual partners but the conduct of the female partners compel them (males) to keep on looking for a better sexual partner. This view was expressed by a male adolescent in the following statement:

"*But you see, some girls are heartless and dangerous. In fact, they can give you broken heart so you are just trying them till you get a faithful partner*"

--Male student (Boys & Girls FGD)

From the quote, it presupposes that early sex initiation can propel one to have more sexual partners as the actors are looking for an ideal partner (someone who is not heartless and dangerous to break one's heart). This finding supports that of Morris et al., (1993) which reported that early sex initiation is predictive of the number of lifetime sexual partners.

4.7 Association between Sex Education and Sexual Behaviour

Multiple regressions technique was employed to investigate the relationship between sex education (abstinence, sex resistance skills and contraceptive-based) and sexual behaviour (age at first sex, contraceptive use and number of lifetime sexual partners).

Three tables were used to present the results on sex education and sexual behaviour for a sample of 162 out of 326 who consistently reported being sexually active. The age at first sexual encounter, contraceptive use and number of sexual partners were taken as the dependent variables and their relationship examined with sex education (independent variable) measured as:

abstinence from sex, sex resistance skills and contraceptive-based sex education. The analysis focused on the standardized coefficient (beta).

The expectation was that the dependent variables will have a relationship with the independent variables which could be weak, moderate or strong. Such a relationship could also be positive or negative. In other words, being exposed to sex education would necessarily influence the sexual behaviour of the respondents. This influence could either be positive or negative. These relationships are discussed below.

4.7.1: Association between Age at First Sexual Encounter and Sex Education

From Table, 4.23, the age of first sexual encounter has a weak positive relationship with sex resistance skills education and contraceptive-based sex education (beta =.075 and beta=.090) respectively. However, the relationship between the age of first sexual intercourse and abstinence from sex education was found to be positive and strong (beta= .69).

Table 4. 23: Association between Age at First Sexual Encounter and Sex Education

Coefficients [a]

Model	Unstandardized coefficients		Standardized coefficients	t	Sig.
	B	Std Error	Beta		
(Constant)	2.804	.424		6.619	.000
Abstinence	.126	.101	. 69	1.240	.216
Resistance skills	.379	.289	.075	1.310	.191
Contraceptive-based	.327	.204	.090	1.600	.111

a. Dependent Variable: if yes to question 36 above, how old were you when you had sex for the first time?

Source: Author's field survey, 2012

This implies that having received instructions on sex resistance skills and contraceptive use did not motivate in-school adolescents to postpone sexual activity to a later time probably after 20 years. However, having received instructions to abstain from sex was a motivating factor for respondents to delay sex to probably after Senior High School.

The results suggest that abstinence from sex education could be effective in protecting and preventing adolescents from indulging in premarital sex which may expose them to problems such as unintended pregnancies, sexually transmitted infections and unsafe abortions which may lead to maternal deaths.

4.7.2: Association between Contraceptive Use and Sex Education

In assessing the relationship between sex education and contraceptive use by sexually experienced respondents, Table 4.24 presents detailed information on the two variables.

Table 4. 24: Association between Contraceptive Use and Sex Education

Coefficients [a]

Model	Unstandardized coefficients		Standardized coefficients	t	Sig.
	B	Std Error	Beta		
(Constant)	1.974	.188		10.509	.000
Abstinence	.073	.045	.092	1.635	.103
Resistance skills	-.125	.128	-.056	-.978	.329
Contraceptive-based	.191	.090	.811	2.107	.036

a. Dependent Variable: in your recent sexual intercourse, what did you or your partner do to prevent sexually transmitted infections?

Source: Author's field survey, 2012

From Table 4. 24, the adolescents' contraceptive use was found to have a weak negative relationship with the receipt of instructions from sex resistance skills (beta= -.056). The relationship between contraceptive use and abstinence from sex was equally weak but positive (beta=.092). There was, however, a positive strong relationship (beta=.811) between contraceptive use and contraceptive-based sex education, an indication that there was an important relationship between these two variables.

This means that having exposed in-school adolescents to sex educational programmes such as abstinence from sex and sex resistance skills did not significantly influence their contraceptive use such as condoms in their sexual encounters. It was only receiving instruction concerning the use of contraceptive that did influence the in-school adolescents to use contraceptives in their sexual encounters.

From the results, it could be suggested that sexually active adolescents could be protected from the negative effects of premarital sex: unwanted pregnancy, sexually transmitted infections and unsafe abortions leading to maternal deaths by educating them on the use of contraceptives especially condoms since they are sexually active.

4.7.3: Association between Sex Education and Number of Sexual Partners

Having examined the relationship between sex education and the number of sexual partners that respondents might have had in their life time, generally, the relationship could be described as weak, negative and strong between the two variables.

From Table 4. 25, the data showed that receiving information on abstinence was not significantly related to the number of life time sexual partners (beta= .075). The data also indicated that there

was a weak negative relationships between number of life time sexual partners and sex resistance skills (beta = -.015). However, the relationship between the number of lifetime sexual partners and contraceptive use was positive and strong (beta =.89).

Table 4. 25: Association between Sex Education and Number of Sexual Partners

Coefficients [a]

Model	Unstandardized coefficients		Standardized coefficients	t	Sig.
	B	Std Error	Beta		
(Constant)	2.696	.253		10.637	.000
Abstinence	.080	.061	.075	1.328	.185
Resistance skills	-.045	.173	-.015	-.259	.796
Contraceptive-based	.213	.122	.89	1.746	.082

a. Dependent Variable: how many different people have you had sex with in your life?

Source: Author's field survey, 2012.

Based on the results, it is possible that regardless of the amount of information and skills acquired from abstinence and resistance skills respectively, it appears there is no significant change in sexual behaviour so far as number of life time sexual partners is concerned.

The results presuppose that the more information and skills acquired from contraceptive use by the in-school adolescents the more they were motivated to explore for more sexual partners probably to experiment such skills. This might account for the strong positive relationship (beta= .89) between the contraceptive-based sex education and the number of life time sexual partners.

4.8 Relationship between Sources of Sex- Related Information and Sexual Behaviour

Multivariate linear regression technique was employed to establish the relationship between sources of sex- related information and sexual behaviour. In this regard, three tables were used to present the information on sources of sex-related information and sexual behaviour for a sample of 326 who participated in the study which sought to examine the effects of sex education on adolescents' sexual behaviour. The relationship between sexual behaviour and sources of sex-related information was therefore examined.

It is pertinent to note that sexual behaviour was the dependent variable measured as: age at first sex, contraceptive use and number of sexual partners while sources of sex-related information was the independent variable measured as: interpersonal and media sources. The researcher expected that sources of sex-related information are related to sexual behaviour. The investigations are discussed below using multivariate linear regression technique with emphasis on standardized coefficients (beta).

4.8.1 Relationship between Sources of Sex-Related Information and Age at First Sexual Intercourse.

Table 4.26 presents detailed information on the relationship between age at first sexual intercourse and sources of sex-related information.

Table 4.26: Relationship between Sources of Sex-Related Information and Age at First Sexual Intercourse.

Coefficients[a]

Model	Unstandardized coefficients		Standardized coefficients	t	Sig.
	B	Std Error	Beta		
(Constant)	3.803	.296		12.829	.000
Interpersonal sources	-.007	.065	.600	-.109	.913
Media sources	.043	.108	.022	.402	.688

a. Dependent Variable: if yes to question 36 above, how old were you when you had sex for the first time?

Source: Author's field survey, 2012

From Table 4.26, the data showed that there was strong positive relationship between age at first sexual encounter and the interpersonal sources of sex-related information (beta=.600). This means that the persons from whom respondents mostly obtain sex-related information have a significant influence on the age at which respondents initiate sex. It also means that the more adolescents obtain sex information from interpersonal sources the more they are likely to initiate early sex.

However, the relationship between the age at first sexual encounter and media sources of sex-related information was weak (beta=.022), an indication that media sources of sex-related information did not greatly determine the age at their first sexual encounter.

The results suggest that interpersonal sources of sex-related information such as peers, parents, teachers and health workers is a better potential avenue for intervening in terms of motivating

the respondents to delay sex as against the media sources which include: internet, television, radio and newspapers.

4.8.2 Relationship between Sources of Sex-Related Information and Contraceptive Use

Another investigation was conducted using multiple regression analysis to establish a relationship between contraceptive use and sources of sex-related information.

Table 4.27: Relationship between Contraceptive Use and Sources of Sex-Related Information

Coefficients [a]

Model	Unstandardized coefficients		Standardized coefficients	t	Sig.
	B	Std Error	Beta		
(Constant)	2.172	.130		16.710	.000
Interpersonal sources	-.049	.028	-.096	-1.739	.083
Media sources	.080	.047	.093	1.690	.092

a. Dependent Variable: in your recent sexual intercourse, what did you or your partner do to prevent sexually transmitted infections?

Source: Author's field survey, 2012

The data indicated that the relationship between contraceptive use and interpersonal sources of sex-related information was weak and negative (beta= -.096). This implies that as respondents obtain more sex-related information from interpersonal sources (mostly peers), there is a correspondent decrease in the use of contraceptives. The observation suggests that respondents' interpersonal sources of sex-related information (peers and friends) discourage them from using contraceptives by probably indicating that contraceptives such as condom do not make sex pleasurable.

The data also showed that there was a relationship between contraceptive use and media sources of sex-related information (beta=.093). This relationship is, however, proved to be weak (.093), which implies that as respondents obtain sex-related information from media sources such as internet and television**, they use less of contraceptives**.

In a summary, whereas there was an inverse relationship between contraceptive use and interpersonal sources of sex-related information, the relationship between contraceptive use and media sources of sex-related information was found to be weak.

It could be suggested from the results that the interpersonal sources (peers and friends) of sex-related information is a threat to the promotion of healthy sexual life among young people so far as contraceptive use is concerned. The results further suggest that media sources of sex-related information could contribute to the promotion of healthy sexual life among young people if the right and timely information (information that meets the emotional needs of young people) is provided by the media on how to use contraceptives to the targeted group.

4.8.3 Relationship between Number of Sexual Partners and Sources of Sex-Related Information

The researcher also wanted to find out the relationship between sources of sex-related information and number of sexual partners respondents have had. Consequently, multiple regressions were used since there were two independent variables and two dependent variables.

Table 4.28: Relationship between Sources of Sex-Related Information and Number of Sexual Partners

Coefficients [a]

Model	Unstandardized coefficients		Standardized coefficients	t	Sig.
	B	Std Error	Beta		
(Constant)	2.943	.176		16.690	.000
Interpersonal sources	-.010	.038	-.014	-.252	.801
Media sources	.066	.064	.57	1.032	.303

a. Dependent Variable: how many different people have you had sex with in your life?

Source: Author's field survey, 2012

From Table 4.30 the relationship between number of lifetime sexual partners and interpersonal sources of sex-related information was found to be weak and negative (beta= -.014).

This implies that as the respondents obtain sex-related information from interpersonal sources, there is a correspondent decrease in the number of s exual partners or the number of different people they have had sex with in their lives time.

The data, however, indicated that the relationship between number of lifetime sexual partners and media sources is moderate and positive (beta=.57) , an indication that the media sources: radio, television internet and newspapers have the propensity to influence the rate at which respondents engage in multiple sexual encounters or have multiple sexual partners.

The results presuppose that whereas the persons from whom respondents mostly obtain sex-related information have an inverse propensity to influence the number of sexual partners that

one may have, the media sources from where respondents get their information concerning sex can moderately influence the number of sexual partners one may have.

4.9 Suggested ways to improve sex education

As part of the specific objectives of the study, core respondents were asked to suggest ways by which sex education could be improved: when and how sex education should be taught and who should provide such information. Additionally, the key informants were also asked the same series of questions in relation to when and how sex education should be taught as well as the preferred sex educators of the adolescents.

Table 4.9.1: Age at Which Sex Education should be Taught

It has been established that sexual behaviour can be an important determinant of basic health, both during adolescence and later in adulthood. As a result, interventions in the form of sex education to control sexual behaviour of the adolescents do not only become imperative but also a human right issue especially in settings where HIV/AIDS is widespread (Lylod, 2007). In view of this, the in-school adolescents were asked to indicate the age at which sex education should be taught in this study.

The results in this study showed that (N=141, 43.3 %) of the respondents were of the view that sex education should be taught between the ages of 11 and 14 and (N=9, 2.8%) of them indicated 19 years and more.

Table 4.29a: Age at which Sex Education Should be Taught

Age	Frequency	Percent
Below 10 years	93	28.5
11-14 years	141	43.3
15-18 years	83	25.5
19 and above years	9	2.8
Total	**326**	**100.0**

Source: Author's field survey, 2012

By deductive implication, majority (N=317, 97.3%) of the adolescents wanted sex education to start from early adolescence through to middle adolescence and late adolescence. This further presupposes that the current age at which the sex educational programmes are rolled out do not meet the emotional, psychological and developmental needs of the adolescents.

In a response to the same question in a Focused Group Discussion two participants had this to say:

"Sex education should start from 11 years because from 11 years onwards, a person begins to have some feelings to have a sexual partner"

--Female Student (Boys & Girls FGD)

"Sex education should start from 11 years going. This is because as an adolescent of 11 years and above, everything reacts; I mean every part of your body reacts so it would be better when you hold discussions with your child on sexual matters from 11 years onwards"

--Male Student (Boys & Girls FGD)

The quotes suggest that adolescents of 11 years and above begin to feel for sex and may experiment it if they get the opportunity as such they should be provided and guided with accurate and timely information to protect them.

When the key informants were asked to indicate the age at which sex education should be taught, the results indicated that majority (N=10, 52.2%) of them said that sex education should be taught from 11-14 years and (N=1, 5.3%) indicated 20 years and above (see Table 4.29b).

Table 4. 29b: Key Informants Expressing Opinions on the Age of Sex Education

Key Informants	Age groups				
	Below 10 yrs (%)	**11-14 yrs (%)**	**15-18 yrs (%)**	**20yrs (%)**	**Total (%)**
Parents	26.3 (5)	15.8 (3)	5.3 (1)	5.3 (1)	**52.6** (10)
Teachers	5.3 (1)	26.3 (5)	0 (0)	0 (0)	**31.6** (6)
Health workers	0 (0)	10.5 (2)	5.3 (1)	0 (0)	**15.8** (3)
Total	**31.6 (6)**	**52.5 (10)**	**10.6 (2)**	**5.3 (1)**	**100 (19)**

Source: Author's field survey, 2012

From Table 4.29b, the data showed that a large proportion (N= 18, 94.7%) of the key informants were of the view that sex education should begin from early adolescents to late adolescents that is from 10yrs -18yrs. This observation makes it possible to speculate that sexual behaviours such as having multiple sexual partners and engaging in early sex identified among the in-school adolescents could be traceable to the age at which sex education started among the adolescents.

4.9.2: How Sex Education Information should be packaged

Research has shown that sex education is intended to serve a very practical public health purpose that is to reduce STIs, HIV/AIDS and unwanted pregnancy among young people (Collins et al., 2002). It is in this regard that the in-school adolescents were asked to suggest how they would want sex- related information to be packaged for them. This is because the form in which it is given, would certainly accomplish the public health objectives it intends to address.

The results showed that majority (N=167, 51.2%) of the core respondents wanted sex education to be given in the form of advice and (N=4, 1.2%) of the respondents indicated that it should be given in the form of text messages (Table 4. 30a).

Table 4.30a: How Sex Education should be taught

Form	Frequency	Percent
Advice	167	51.2
A discussion	138	42.3
A warning	17	5.2
Text messages	4	1.2
Total	**326**	**100.0**

Source: Author's field survey, 2012

The fact that majority (N=305, 93.5%) of the adolescents wanted to obtain sex- related information in the form of advice and discussion suggest that the form in which sex education is currently provided is not meeting the needs of the adolescents.

The responses from the Focused Group Discussion with the adolescents revealed that the use of technology was the preferred form through which they wanted to obtain sex-related information. This is how an adolescent boy summed it up. He said that:

"Sex education should be done using technology on the mobile phones just like the way they send Bible quotations and love messages to people. Information concerning sex education could be sent twice a week or every day to young people"

--Male student (Boys only FGD)

From the quote, it appears that the in-school adolescents have fallen in love with technology as such they want to use it in almost every aspect of their lives including obtaining information concerning sex. The statement further suggests that currently the use of technology in relation to sex education is not being explored or it is inadequately employed for the benefits of the adolescents.

On the part of the key informants, majority (N= 14, 73.7%) of them were of the view that sex education should be given to the beneficiaries in the form of discussion and (N=1, 5.3%) of the respondents said sex- related information should be given in the form of warning (Table 4.30b).

Table 4. 30b: Key Informants' Opinions on How Sex Education should be Taught

	Form			
Key Informants	**Advice (%)**	**Discussion (%)**	**Warning (%)**	**Total (%)**
Parents	5.3 (1)	47.4 (9)	0 (0)	52.6 (10)
Teachers	15.8 (3)	10.5 (2)	5.3 (1)	31.6 (6)
Health workers	0 (0)	15.8 (3)	0 (0)	15.8 (3)
Total	**21.1 (4)**	**73.7 (14)**	**5.3 (1)**	**100 (19)**

Source: Author's Field survey, 2012

The pattern observed in Table 4.30b where majority (N=14, 73.7%) of the key informants suggested discussion as the form in which sex education should take, presupposes that the existing forms in which sex education is provided is not achieving the expected results.

The data further suggest that there is inadequate adult –child discussion on reproductive health issues hence the adults especially parents would like to bridge this gap. This seemingly inadequate parent child communication on sexual matters is confirmed by Kumi-Kyereme et al., (2007) who found that there is inadequate child/parent communication on sexual and reproductive health matters. The researchers reported that if it does occur, is mostly in the form of instructions and leaving little or no room for discussion.

4.9.3 Respondents Preferred Sex Educators

Teens often find peer sex educators more credible than adult sex educators (DiClemente, 1993 as in Mason, 2003). The study further reported that the peer educators were found to communicate in readily understandable ways and served as positive role models while dispelling misconceptions that most youth are initiating sex. In view of this, the core respondents were asked to indicate their preference for obtaining sex-related information (sex education).

The present study revealed that (N=131, 40.2%) of the adolescents indicated that they would prefer to obtain sex related information from their parents while (N=3, .9%) of them indicated internet as a place where they would prefer to obtain sex- related information (Table 4.31a).

Table 4.31a: Respondents Preference for Obtaining Sex- Related Information

Preferences	Frequency	Percent
Media	27	8.3
Parents	131	40.2
Peers/friends	40	12.3
Health workers	60	18.4
Teachers	54	16.6
Pastors/Priest/Imam	11	3.4
Internet	3	.9
Total	**326**	**100.0**

Source: Author's field survey, 2012

From Table 4.31a, it is interesting to note that a large proportion (N= 296, 90.9%) of the respondents preferred to obtain sex-related information interpersonally from (parents, health workers, peers, teachers and pastors/priest/Imam) as against media sources (N=30, 9.2%).

It could be suggested from the data that face -to-face interaction provides an opportunity for better appreciation of sex-related matters and exchange of ideas in relation to sex education as compared to the use of media where one may not have the opportunity to ask questions, seek for clarifications or make contributions here and then. This probably explains why most of the respondents preferred interpersonal sex educators as against media sex educators.

In a Focused Group Discussion, the in-school adolescents indicated varied places where they would like to obtain sex-related information as two participants have this to say:

"Sex education should begin at the primary school because there is nothing like they are still children and they don't know anything in relation to sex nowadays. In fact, it should be taught anywhere that young people meet or gather"

--Male student (Boys & Girls FGD)

"Sex education should employ technology using mobile phones just like the way they send Bible quotations and love messages to people. In the same way information concerning sex education could be sent to us twice a week or even every day"

--Male student (Boys only FGD*)*

One of the implications of the statements is that the current sex educational programmes do not use technology in carrying out their messages to the beneficiaries. Again, the fact that the adolescents proposed that sex education should be taught anywhere young people are gathered, clearly suggests that sex education seem to be formalized that is, it usually takes place in the classroom.

For the key informants, (N=8, 42.2%) of the key informants opined that parents would be the preferred source of sex-related information while (N=2, 10.6%) indicated that media, peers/friends, health workers would be the preferred sources of sex-related information for in-school adolescents respectively.

Table 4.31b: Key Informants Expressing their Opinions on Adolescents Preferred Sex Educators.

Key Informants	Preferences					
	Media (%)	Parents (%)	Peers (%)	Health workers (%)	Teachers (%)	Total (%)
Parents	0 (0)	21.1 (4)	5.3 (1)	5.3 (1)	21.1 (4)	52.6 (10)
Teachers	10.5 (2)	5.3 (1)	5.3 (1)	5.3 (1)	5.3 (1)	31.6 (6)
Health workers	0 (0)	15.8 (3)	0 (0)	0 (0)	0 (0)	15.8 (3)
Total	**10.6 (2)**	**42.2 (8)**	**10.6 (2)**	**10.6 (2)**	**26.4 (5)**	**100 (19)**

Source: Author's Field survey, 2012

It is observed that a large proportion (N=17, 89.8%) of the key informants were of the view that in-school adolescents would prefer interpersonal sources as against media sources (N=2, 10.6%) being their sources of sex-related information. This observation is suggestive of the fact that face-to –face interaction makes it possible for questions and answer section as such interaction is deepen to satisfy the beneficiaries' curiosity.

The results further suggest that parent-child communication could be a potential avenue that could be used to achieve the main aim of sex education -promoting healthy sexual life. This is because the proportion of parents (N=131, 40.2% and N= 8, 42.2%) as a preferred source of getting sex-related information for the adolescents is greater than the other interpersonal sources such as peers, health workers and teachers (Tables 4.31a & 4.31b).

However, this finding is contrary to that of DiClemente (1993) as in Mason (2003) and Kumi-Kyereme et al., (2007) who found that adolescents often prefer peer sex educators to adult sex

educators because the former are more credible and communicate in readily understandable ways.

It is therefore important to note that in spite of the technological environment which has the propensity to negatively influence the adolescents' sources of sex-related information and eventually sexual behaviour, the in-school adolescents still prefer parents for that matter adult sex educators.

The data presentation, analysis and discussions form the foundation for the key findings, conclusion and recommendations of the study which can be found in chapter five.

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.0 Introduction

This chapter presents a summary of the major findings in the study which sought to examine the sex education and adolescents' sexual behaviour of selected Senior High schools in the Kumasi Metropolis. Specifically, the study sought to: discover the kinds of sex educational programmes that were available to adolescents, find out the sources of sex-related information for the adolescents in Senior High Schools and examine the effects of the sex educational programmes on the adolescents' sexual beaviour.

In order to attain the objectives of the study a mixed method (quantitative and qualitative) was employed with concurrent triangulation as a strategy of inquiry. The quantitative aspect of the study collected the data from 344 core respondents and 19 key informants using self-administered questionnaire.

The qualitative aspect of the study used three (3) Focused Group Discussions (FGDs) to collect data from the in-school adolescents who did not participate in answering the questionnaire. Descriptive and inferential statistical tools were employed to analyse the data collected. Descriptive statistical tools such as frequency tables were used to analyse the two set of data collected from core respondents and key informants. Multiple regressions were employed as an inferential statistical tool to test the hypotheses of the study.

The findings covered socio-demographic characteristics of respondents, kinds of sex educational programmes available to in-school adolescents, in-school adolescents' sources of sex-related information and the sexual behaviour of the in-school adolescents. Included in the chapter are the views sought from both core respondents and key informants concerning when and how sex education should be provided and who should provide it.

The chapter also provided the conclusions drawn from the study, the strengths and limitations of the research report, recommendations and areas for further research.

5.1 Summary of Key Findings

5.1.1 Socio-demographic characteristics of respondents:

The study found that majority of the respondents were females; both among the core respondents and the key informants, i.e. (N=175, 53.7% and N= 10, 52.6%) respectively. The majority (N=182, 55.8%) of the core respondents were found to be between the ages of 16 and 18 years confirming the age of completion of senior High School in Ghana. Most (N= 17, 89.4%) of the key informants were below 45 years.

Christianity was the main religion of both students and key informants in the study area with (N=292, 89.6% and N=16, 84.2) respectively. Most of the core respondents were found to be in boarding houses (N= 245, 75.2 %) and in their first and second year (N=194, 59.5%). In relation to their living arrangement, most (N=184, 56.4%) of the core respondents were from the intact families. Thus, they live with both biological parents in the Ashanti region.

5.1.2 Kinds of sex educational programmes available to In-school adolescents

Of special interest to this study was to discover the kinds of sex educational programmes available to the in-school adolescents. The study found three kinds namely: abstinence, sex resistance skills and contraceptive-based sex education.

Investigating whether students have ever attended a lesson in the school on abstinence from sex, the results revealed that majority (N=288, 88.3%) reported having received information on abstinence from sex until marriage from the school. The key adults confirmed this with a majority (N=16, 84.2%) of them reported discussing abstinence from sex with adolescents.

It was found that majority (N= 265, 81.3%) of the students have attended lessons on how to say no to sex in the school. However, majority (N=13, 68.5%) of the key informants reported that they did not hold discussions with adolescents on sex resistance skills.

In relation to contraceptive-based sex education, about sixty-three percent (N= 205, 62.9%) of the core respondents reported having attended lessons in the school on how to use contraceptives to protect themselves from unwanted pregnancies and sexually transmitted infections. This was affirmed by the key informants as majority (N= 15, 79%) indicated having held discussions with adolescents on contraceptive use.

5.1.3 Adolescents Sources of sex-related information

The other specific objective of the study was to find out where adolescents mostly obtain their sex-related information. These were interpersonal and media sources.

For the interpersonal sources of sex-related information, the survey found that peers/friends and parents were the main sources of sex-related information of the in-school adolescents with (N=128, 39.3% and N=115, 35.3%) respectively. The key informants confirmed that

peers/friends and parents were the main interpersonal sources of sex-related information for the adolescents with (N= 9, 47.4% and N= 8, 42.2%) respectively.

In connection with the media sources of sex-related information for the adolescents, the study found that the internet and television were the main sources of sex-related information for the in-school adolescents with (N=162, 49.7% and N= 107, 32.8%) respectively. This trend was affirmed by the key informants as they opined that in-school adolescents mostly obtain sex-related information from the internet and television with (N= 8, 42.1% and N= 6, 31.6%) respectively.

5.2 Sexual Behaviour

The study explored the sexual behaviours likely to be exhibited by the student respondents. The sexual behaviours examined in this section of the study included; sex initiation, contraceptive use and number of sexual partners both in the last twelve months and lifetime.

Having investigated whether in-school adolescents were sexually active or not, the study revealed that majority (N= 164, 50.3%) of the respondents were sexually active. The study further found that they initiated sex in their late adolescence that is 17-19 years (N= 89, 27.3%). The adolescents mostly have sex with their peers/friends (N= 128, 39.3%) with the main aim of showing love to their partners (N=94, 28.8%).

Contraeeptive use was explored in order to find out if sexually active adolescents make use of them to protect themselves. The study indicated that (N=90, 27.6% and N=14, 4.3%) of the sexually active respondents used condoms and oral contraceptives respectively to prevent unwanted pregnancies in their first sexual encounter. Thus, N=104, 31.9% used contraceptives to prevent unintended pregnancies in their first sexual intercourse. In their recent sexual encounters,

(N= 94, 28.8% and (N=33, 10.1%) used condoms and oral contraceptives respectively to prevent unwanted pregnancies. That is (N=127, 38.9%) used contraceptives to prevent unwanted pregnancies in their recent sexual intercourse.

For the prevention of sexually transmitted infections in their first sexual encounters, (N=99, 30.4%) of the sexually active respondents used condoms to prevent sexually transmitted infections and (N=109, 33.5%) of them used condoms to prevent sexually transmitted infections in their recent sexual intercourse.

In relation to the number of sexual partners, the research revealed that in the last twelve months, (N=82, 25.2%) of the sexually active adolescents have had single sexual partners. The other (N= 82, 25.1%) of them have had multiple sexual partners. For lifetime sexual partners, the study found that about (N=104, 31.9%) of them have had multiple sexual partners.

5.2.1 Association between Sex Education and Sexual Behaviour

The study sought to establish the relationship between sex education (abstinence, sex resistance skills and contraceptive-based) and sexual behaviour (age at first sex, contraceptive use and number of lifetime sexual partners) by employing multiple regression technique. The relationships and findings of the two variables have been established below.

As regards the relationship between the age at first sexual encounter and sex education, there was a weak positive relationship between sex resistance skills education and contraceptive-based sex education (beta =.075 and beta=.090) respectively. There was, however, a strong positive relationship between the age of first sexual intercourse and abstinence from sex education (beta= .69).

In connection with contraceptive use and sex education, the study found a weak negative relationship between contraceptive use and sex resistance skills (beta= -.056). Additionally, the relationship between contraceptive use and abstinence from sex was equally weak but positive (beta=.092). However, the relationship between contraceptive use and contraceptive-based sex education was positive and strong (beta=.811).

For the association between number of life time sexual partners and sex education, the results of the study showed that receiving information on abstinence was not significantly related to the number of life time sexual partners (beta= .075). The data also indicated that there was a weak negative relationship between number of life time sexual partners and sex resistance skills (beta = -.015). However, the relationship between number of sexual partners and contraceptive-based sex education was positive and strong (beta =.89).

5.2.2 Relationship between Sources of Sex Related Information and Sexual Behaviour

The study further examined the relationship between sources of sex-related information measured as: interpersonal and media sources and sexual behaviour also measured as: age at first sexual encounter, contraceptive use and number of sexual partners using the same multiple regression technique.

For the relationship between age at first sexual encounter and the interpersonal sources of sex-related information, the survey results showed that there was a moderate positive relationship between the two variables (beta=.600). However, the relationship between the age at first sexual encounter and media sources of sex-related information was weak (beta=.022), an indication that media sources of sex-related information did not greatly determine the age of their first sexual encounter.

With regard to the contraceptive use and interpersonal sources of sex-related information, the results indicated that the relationship between contraceptive use and interpersonal sources of sex-related information was weak and negative (beta= -.096). The results also showed that there was a relationship between contraceptive use and media sources of sex-related information (beta=.093). This relationship is, however, proved to be weak (.093).

As regards the relationship between the number of lifetime sexual partners and interpersonal sources of sex-related information, the study found the relationship to be weak and negative (beta= -.014). However, the relationship between number of lifetime sexual partners and media sources was moderate and positive (beta=.57). This implies that the media sources: radio, television, internet and newspapers have the propensity to influence the rate at which respondents engage in multiple sexual encounters or have multiple sexual partners.

5.3 Suggested Ways to Improve Sex Education

In connection with ways to improve sex education, the respondents were asked to suggest: the age at which sex education would be appropriate? How sex education should be packaged for its beneficiaries? And the preferred sex educators? The study found the answers to these questions as follows:

About (N=141, 43.3%) of the core respondents wanted sex education to start during early adolescence (11-14 years). The key informants affirmed this opinion with majority (N=10, 52.2%) of them indicating 11-14 years as the appropriate age to start sex education.

With regard to the form in which sex education information should be provided, the study revealed that majority (N= 167, 51.2%) of the students wanted sex education to be provided in

the form of advice. Majority (N=14, 73.7%) of the key adults on the other hand preferred that sex education information should be provided in the form of discussion.

Lastly, about forty percent (N=131, 40.2%) of the in-school adolescents preferred parents as their sex educators. The key adults also opined that adolescents preferred parents as their sex educators with (N= 8, 42.2%) of them indicating parents.

5.4 Concluding Reflections and Recommendations

The study sought to examine the effects of sex education on adolescents' sexual behaviour in selected senior High school in the Kumasi Metropolis. The chapter presents the researcher's reflective thoughts on the results of the study relative to the research questions and objectives which include: the kinds of sex educational programmes available to in-school adolescents, sources of sex-related information and sexual behaviour. In addition, conclusions were also inferred from the relationships established between sexual behaviour and sex education and the associations established between sources of sex-related information and sexual behaviour. Finally, the chapter presents reflections on suggested ways to improve sex education and outlines related recommendations for addressing the problem studied and for future research.

5.4.1 Reflections on Kinds of School -based Sex Education

The study identified three kinds of sex educational programmes available to the in-school adolescents within the study area. These included: abstinence from sex, sex resistance skills education and contraceptive-based sex education as such conclusions were inferred from them.

Abstinence from sex appears to be a safer option to avoid sex-related consequences such as unintended pregnancies, unsafe abortions and sexually transmitted infections hence it is much cherished and emphasized. It could also be due to the fact that premarital sex is usually abhorred in the Ghanaian society.

In relation to sex resistance skills, majority of the key informants indicated that they did not hold discussions with adolescents on it. It could therefore be suggested from the finding that one or few of the key informants provided information in their capacities as resources persons on sex resistance skills education to the students. Additionally, it could also be due to inadequate knowledge on the part of the key informants to educate the adolescents in that respect.

As both students and key adults have had sufficient discussions on contraceptive-based sex education, it could be inferred that the in-school adolescents were suspected to be sexually active as such contraceptive-based sex education was employed to equip them with knowledge and skills so as to be able to protect themselves from sex-related consequences.

5.4.2 Reflections on Sources of Sex-Related Information

Two major sources of sex-related information (interpersonal and media) for the in-school adolescents were explored in the study and the conclusions inferred from them were:

First, the in-school adolescents obtain sex-related information from their parents after consulting their peers in order to confirm or reject what their peers or friends might have told them.

Second, the use of the internet and watching of television could be very influential in providing adolescents with sufficient sex education and thereby creating the needed impact. However, this could also be a threat to promotion of abstinence from sex, one of the most cherished values of

the Ghanaian society. This stem from the fact that pornographic materials can easily be accessed on the internet and this may encourage adolescents to experiment what they watch.

5.4.3 Reflections on Adolescents Sexual Behaviour

There were three kinds of sexual behaviours examined in the study. These included sexual activity, contraceptive use by sexually active adolescents and number of sexual partners. Based on the findings the conclusions following were inferred:

That sexual activity is a common phenomenon among in-school adolescents. It can also be concluded that peer influence is a prominent feature of adolescents' sexual activity. One may also argue that peer influence can equally promote healthy sexual life if intervention programmes actively involve them.

As regards contraceptive use with the main aim of preventing unwanted pregnancies and sexually transmitted infections, it could be realized that there is a behavioural change in relation to that. However, the change appears gradual suggesting more resources need to be committed to sensitize young people to engage in protected sex

Having multiple sexual partners ~~seems~~ to be a common practice among the in-school adolescents.

5.4.4 Reflections on Association between Sex Education and adolescents Sexual Behaviour

Having examined and established the associations between sex education measured as: (abstinence from sex, sex resistance skills and contraceptive-based sex education) and sexual

behaviour operationalised as: (sexual activity, contraceptive use and number of sexual partners) the following conclusions could conveniently be drawn.

Abstinence from sex education could be an effective tool in protecting and preventing adolescents from indulging in premarital sex. Abstaining from premarital sex will in turn protect them from unintended pregnancies, sexually transmitted infections and unsafe abortions.

Another conclusion was that the social problems associated with premarital sex such as unwanted pregnancy, sexually transmitted infections and unsafe abortions could be reduced by educating sexually active adolescents to engage in protected sex via the use of contraceptives to protect themselves.

The more information and skills acquired from contraceptive use by the in-school adolescents the more they were motivated to explore for more sexual partners probably to experiment such skills. This might account for the strong positive relationship (beta=.89) between the contraceptive-based sex education and the number of life time sexual partners.

5.4.5 Reflections on Relationship between Sources of Sex Related Information and Sexual Behaviour

After examining and establishing the relationships between sources of sex-related information and sexual behaviour, three major conclusions could be made.

Firstly, the interpersonal sources of sex-related information such as peers, parents, teachers and health workers is a better potential avenue for intervening in terms of motivating the respondents to delay sex as against the media sources which has the propensity to motivate them to initiate sex.

Another interesting conclusion could be that the interpersonal sources (peers and friends) of sex-related information are a threat to the promotion of healthy sexual life among sexually active young people so far as contraceptive use is concerned. However, in relation to contraceptive use media sources of sex-related information could contribute to the promotion of healthy sexual life among young people if accurate and timely information is provided by the media on contraceptive use to the targeted group.

Third and last, one can conclude that whereas the interpersonal sources of sex-related information have an inverse propensity to influence the number of sexual partners that one may have, the media sources from where respondents get their information concerning sex can moderately influence the number of sexual partners one may have.

5.5 Reflections on Suggested Ways to Improve Sex Education

Based on the findings of the suggestions provided by respondents in relation to the ways to improve sex education, the following conclusions could be drawn.

In the first place, the incidence of adolescents' sex-related consequences could be reduced significantly if sex education starts early enough through to late adolescence.

Secondly, to significantly improve sex education and get the needed behavioural change, then sex education should be provided in the form of advice and discussion simultaneously.

Lastly, parents could be very good potential avenue for effective delivery of sex educational information to young people especially in-school adolescents.

5.6 Recommendations

The study clearly revealed sexual behaviour could be a determining factor of basic health both during adolescence and later in adulthood. In order to promote healthy sexual life and protect the next generation, the following interdisciplinary recommendations become imperative. They are broadly grouped under National Policy-Oriented Recommendations; adolescents- oriented recommendations and keys adults-oriented recommendations.

5.6.1 National Policy-Oriented Recommendations

- Ministry of Education and the Ghana Education Service should develop sex educational messages for adolescents in both Junior and Senior High Schools. These messages could be of two kinds: Refusal –Oriented Messages (ROM) and Goal Attainment –Oriented Messages (GAM). The messages under ROM may include:

  Education Now Sex Later (ENSL),

  Studies Now Sex Later (SNSL)

  Self-Development Now Sex Later (SDNSL).

The messages under GAM may also include:

Premarital Sex, an Enemy of Progress (PS, EP)

Premarital Sex, a threat to my Future (PS, TMF)

Premarital Sex, a Gateway to an Unwanted Pregnancies and STIs (PS, GUPS)

These messages should be posted on the internet and other media sources for adolescents. For wider coverage they could be sent as text messages to the adolescents using English Language and as many Ghanaian languages as possible.

- Ministry of Education, the Ghana Education Service and Ministry of Health should collaborate and organize regular seminars on sex education, once a month (trice a term) for the adolescents. Teachers should reinforce such seminars during form meetings with students. This education should be age appropriate and gender sensitive.

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5.6.2 Adolescents- oriented recommendations

- The relationship between the age of first sexual intercourse and abstinence from sex education was found to be positive and strong. It is therefore recommended that adolescents should be encouraged to abstain from premarital sex. This could be done through the formation of virgins clubs in the schools. Resources persons from religious bodies, health professionals and victims of HIV/AIDS campaigners could be an effective tool for achieving abstinence from sex.
- Sexually active adolescents should be educated and encouraged to use contraceptives more especially condoms to prevent both unwanted pregnancies and sexually transmitted infections. Resources persons could be invited to give lectures and talks on the devastating effects of sexually transmitted infections and unsafe abortions on the victims using images and pictures to create an effect.
- The concept of peer sex education should be introduced. Peer sex educators clubs should be formed. These peer sex educators should be trained and empowered with accurate reproductive health information so as not to provide wrong information to their peers.

- Adolescents should be empowered to be assertive. This could be achieved by empowering them with communication skills (being open and honest by sharing sexual life experiences) and negotiating skills (demanding for safer sex choices). Resources persons including parents, teachers, health professionals and peer educators could be of immense help in this direction.
- Adolescents should be helped to work out life plans and to develop skills that will help to put these plans into practice, including awareness of the consequences of events and behaviours that might interfere with such plans, such as an unplanned pregnancy leading to unsafe abortions. They should be given skills to make them protagonists of their own destiny by career counselors, teachers and parents.

5.6.3 Key Adults-oriented recommendations

- Parents and Teachers should be empowered with reproductive health information. This can be achieved by organising regular seminars at work places and for members of the various groupings within the Churches and Mosques. These seminars could also be extended to other associations that meet regularly. Health professionals and other resource persons within such groupings should take up this mantle.
- Consequently, the key adults (parents, teachers and health professionals) should then be encouraged and motivated to have open and honest discussions on sex-related matters with adolescents.

5.7 Strengths and Limitations of the study

One of the strengths of this study emanated from the research design employing the concurrent triangulation as its strategy. This approach used separate quantitative and qualitative methods as a means to off-set the weakness inherent within one method with the strengths of the other.

The other strength of the study was the choice of an appropriate data-collection time. The data collection was done during the revision week of the end of second term examinations in the schools and did not greatly interfere with academic work hence high number of participants in the study.

However, the research report could not avoid the following limitations:

- Some questions on sexual experiences demanded respondents to remember what happened in the past, creating the possibility of recall bias.
- Sex education and sexual behaviour appears to be a sensitive topic and respondents may feel reluctant to disclose their sexual experiences.
- The quantitative aspect of the study used a self-administered questionnaire, which included questions with multiple-choice answers. It was, therefore, prone to information bias since respondents had only the given answers to choose from. They might give answers based on guess work from the given answers.

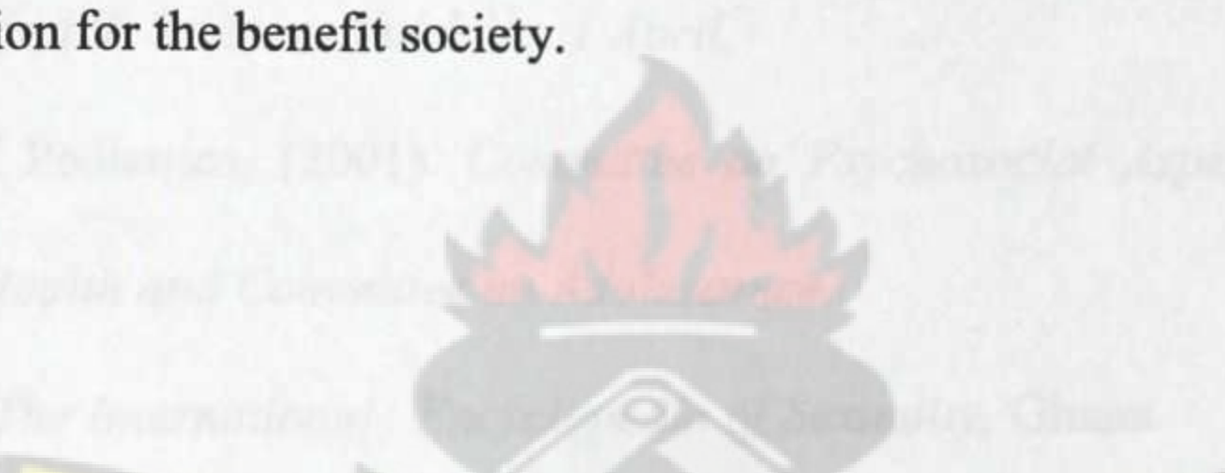
5.8 Recommendation for Future Research

The study focused on three sexual behaviours likely to be exhibited by in-school adolescents. These included: sex initiation, contraceptive use and number of sexual partners. Future study could examine the effects of sex education on other forms of in-school adolescents' sexual behaviours such as oral sex, sexual orientation, rimming and masturbation that could be self or mutual.

The study found a strong positive relationship between contraceptive use and contraceptive-based sex education (beta=811). This implies that the more the adolescents were exposed to how

to use contraceptives, they more they engaged in protected sex. However, the study also found a strong positive (beta=89) relationship between number of lifetime sexual partners and contraceptive use. This means that as the adolescents gain more knowledge on how to use contraceptives, the more they were motivated to have more sexual partners.

Based on these findings, it is recommended that a further study be conducted to critically evaluate contraceptive-based sex education and number of sexual partners to be able to find a balance between the variables in order to promote healthy sexual life among young people and protect the next generation for the benefit society.



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APPENDIX A

QUESTIONNAIRE FOR STUDENTS

MASTERS THESIS

SEX EDUCATION AND ADOLESCENTS SEXUAL BEHAVIOUR OF SELECTED SENIOR HIGH SCHOOLS IN THE KUMASI METROPOLIS

By

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DEPARTMENT OF SOCIOLOGY AND SOCIAL WORK

FACULTY OF SOCIAL SCIENCES, KNUST

SUPERVISORS:

FRANCESS DUFIE AZUMAH (PhD)

KWAKU YEBOAH (PhD)

APPENDIX A: QUESTIONNAIRE FOR STUDENTS

Hello! My name is Robert K. Mokulogo, a postgraduate student from the Department of Sociology and Social Work, KNUST. I am collecting data/information for the preparation of my thesis on **Sex education and adolescents sexual behaviour of selected Senior High Schools in the Kumasi Metropolis.** The information you will give will be kept confidentially and used only for academic purposes. You may find some of the questions embarrassing, but I will like you to answer all the questions truthfully because your identity will not be attached to the information you are giving.

THANK YOU.

SECTION 1: Demographic Characteristics of Respondents

INSTRUCTIONS: Please circle only one answer per question. If you choose *other* please *specify* ……., please write your answer in the space

1. What is your sex?

   1.Male 2. Female

2. How old are you? Indicate your age group.

   1. 13-15years 2. 16 -18years 3. 19-21 years 4. 22-24 years and above

3. What is your current level in school?

   1. SHS1 2. SHS2 3. SHS3 4. SHS4

4. Where is your current region of residence during vacation? Write the name of the region

   Region……..

5. What is your religious affiliation?

   1. Christianity 2. Islam 3. Traditional 4. Other specify…… …

6. What is your student status in terms of residence?

   1. Day 2. Boarding 3. Student hostel 4. Rented apartment

7. Who are you currently living with?

   1. I live with my mother 2. I live with my father 3. I live with both parents

   4. Other specify:……

SECTION 2: Kinds of Sex Educational Programmes

INSTRUCTIONS: Please circle only one answer per question. If you choose *other specify*……., please write your answer in the space.

8. Have you ever heard of sex education? **If No to Question (8) skip to Question (10)**

1. Yes 2. No

9. Where did you first hear about this?

1. Parents 2. Media 3. Peers/Friends 4. Teachers/School

5. Other specify……..

10. Have you ever attended a lesson in the School on Don't Have Sex until Marriage?

If No to Question (10) skip to Question (13)

1. Yes 2. No 3. Other specify……

11. What was the lesson on Don't Have Sex until Marriage about?

1. Abstain from sex until marriage 2. Use condom during sexual intercourse

3. How to say 'NO' to sex 4. Other specify……

12. Who delivered the lesson on Don't Have Sex until Marriage about?

1. Teachers 2. Peers/Friends 3. Health workers

5. Other specify…….. ……

13. Have you ever attended a lesson in the School on How to Say 'NO' To Sex?

If No to Question (13) skip to Question (16)

1. Yes 2. No 3. Other specify.....

14. What exactly was the lesson on How Say 'NO' To Sex about?

1. How to refuse pressures from peers to have sex 2. How to use condoms during sex

3. Don't have sex until marriage 4. Other specify.....

15. Who provided the information on How to Say 'NO' To Sex?

1. Teachers 2. Peers/Friends 3. Health workers 4. Other specify .....

16. Have you ever attended a lesson in the School on Contraceptive use?

If No to Question (16) skip to Question (19)

1. Yes 2. No 3. Other specify.....

17. What was the lesson on Contraceptive use about?

1. How to prevent sexually transmitted infections/pregnancy 2. How to say 'NO' to sex

3. Spacing of child birth 4. Other specify.....

18. Who provided the information on Contraceptive use?

1. Teachers 2. Peers/Friends 3. Health workers 4. Other specify.....

SECTION 3: Sources of Sex -Related Information

INSTRUCTIONS: Please rank your answers as 1st, 2nd, 3rd etc. If you choose *other specify*……., please write your answer in the space.

19. From whom do you mostly get your information on sex?

Please rank as 1st, 2nd, 3rd, etc

1. Parents
2. Teachers
3. Health workers/Professionals
4. Family members (aunties and uncles)
5. peers/friends
6. Other specify: ……

20. Where do you mostly get your information on sex?

Please rank as 1st, 2nd, 3rd, etc

1. Internet
2. Television
3. Newspapers
4. Radio
5. Other specify……

SECTION 4: Knowledge of Sex- Related issues

INSTRUCTIONS: Please circle only one answer per question. If you choose *other specify*……., please write your answer in the space.

I. Pregnancy

21. During which time of the monthly cycle does a girl/woman have the greatest chance of becoming pregnant?

1. One week after her period has ended 2. During her period

3. Two weeks before her period starts 4. Don't know/ unsure

22. What can a person do to avoid pregnancy?

1. Should not do anything 2. Use condoms 3. Pray to God 4. Don't know/unsure

23. Which one of these do you think can be a major effect of a pregnancy on an adolescent girl?

1. The girl may drop out of school 2. The girl may die during labour

3. The girl would become a beautiful mother 4. Don't know

II. Sexually Transmitted Infections (STIs)

Instructions: For Question 24 you can circle more than one. But for Questions 25-26, please circle only one answer per question. If you choose *other specify*…, please write your answer in the space.

24. Indicate some sexually transmitted diseases/infections you know of.

1. Gonorrhoea 2. HIV/AIDS 3. Chlamydia

4. Syphilis 5. Other specify.....

25. What can a person do to prevent sexually transmitted infections?

1. Not having sex 2. Use condoms 3. Pray to God 4. Don't know/unsure

26. If a person has a sexually transmitted infection and is not treated immediately, what can happen?

1. The person may not be able to give birth 2. The person may give birth to twins

3. The person may cough all the time 4. Don't know

III. Abortion

INSTRUCTIONS: Please circle only one answer per question. If you choose *other specify*....., please write your answer in the space.

27. Is abortion legal in Ghana?

1. Yes 2. No 3. Don't know.

28. If you get an unwanted pregnancy /if you impregnate a girl unintentionally will you seek abortion?

1. Yes 2. No 3. Other specify……

29. If you decide to seek abortion, where will you go for the abortion?

1. Hospital/ Clinic 2. Herbalist 3. Home 4. Other specify……

30. Which one of these can be a major effect of abortion on an adolescent?

1. The adolescent feels happy for terminating the pregnancy
2. It can lead to death of the adolescent
3. The adolescent can go back to school
4 Other specify……..

SECTION 5: Sexual Behaviour

INSTRUCTIONS: Please circle only one answer per question. If you choose *other specify*……., please write your answer in the space.

I. **Sex Initiation**

31. Do you have a boy/girl friend?

1. Yes 2. No 3. Other specify……

32. Have you ever had sexual intercourse?

1. Yes 2. No 4. Other specify.....

33. If **Yes to question (32) above,** with whom?

1. friend/peer 2. Teacher 3. Closed relative 4. Other specify.....

34. If **Yes to the question (33) above,** how old were you when you had sex for the first time?

1. Below 12 years 2. Between 13 and 16 years

3. Between 17 and 19 years 4. Other specify.....

35. Which one of the following best gives the reason for your first sexual intercourse?

1. Wanted to show love to my partner 2. Was forced to have sex

3. Had sex in exchange for gift 4. Other specify.....

II. Contraceptive Use:

INSTRUCTIONS: Please circle only one answer per question. If you choose *other specify*....., please write your answer in the space.

36. The first time you had sex, what did you do to prevent pregnancy?

1. Used condom 2.Did nothing 3. Took oral contraceptives 4. Rhythm 5. Never had sex

37. The first time you had sex, what did you do to prevent sexually transmitted infections?

1. Used condom 2. Did nothing 3. Never had sex

38. In your recent sexual intercourse, what did you or your partner do to prevent pregnancy?

1. Used condom 2. Did nothing 3. Took oral contraceptives 4. Rhythm

5. Never had sex

39. In your recent sexual intercourse, what did you or your partner do to prevent sexually transmitted infections?

1. Used condom 2. Did nothing 3. Never had sex

III. Sexual Partners

INSTRUCTIONS: Please circle only one answer per question.

40. How many different people have you had sex with in the last twelve (12) months?

1. One 2. Two 3. Three and above 4. Never had sex

41. How many different people have you had sex with in your life?

. 1. One 2. Two 3. Three and above 4. Never had sex

SECTION 6: Suggested Ways to Improve Sex Education

INSTRUCTIONS: Please circle only one answer per question. If you choose *other specify*……., please write your answer in the space.

42. At what age will you suggest sex education be taught

1. Below 10 years 2. 11-14 years 3. 15-18 years 4. Other specify ……

43. How do you want sex education information to be given to you? In the form of …

1. An advice 2. A discussion 3. A warning 4. Other specify……

44. Indicate which one of these you would prefer to obtain sex- related information.

1. Media 2. Parents 3. Peers/friends 4. Health workers/professionals 5. Teachers/School

6. Pastors/priests/Imams 7. Other specify……

THANK YOU FOR TAKING TIME TO ANSWER THE QUESTIONS

APPENDIX B

QUESTIONNAIRE FOR KEY INFORMANTS (TEACHERS)

MASTERS THESIS

SEX EDUCATION AND ADOLESCENTS SEXUAL BEHAVIOUR OF SELECTED SENIOR HIGH SCHOOLS IN THE KUMASI METROPOLIS.

By

ROBERT KUCHENGYE MOKULOGO

DEPARTMENT OF SOCIOLOGY AND SOCIAL WORK

FACULTY OF SOCIAL SCIENCES, KNUST

SUPERVISORS:

FRANCESS DUFIE AZUMAH (PhD)

KWAKU YEBOAH (PhD)

APPENDIX B: QUESTIONNAIRE FOR KEY INFORMANTS (TEACHERS)

Hello! My name is Robert K. Mokulogo, a postgraduate student from the Department of Sociology and Social Work, KNUST. I am collecting data/information for the preparation of my thesis on **Sex education and adolescents' sexual behaviour of selected Senior High Schools in the Kumasi Metropolis.** The information you will give will be kept confidentially and used only for academic purposes. You may find some of the questions embarrassing, but I will like you to answer all the questions truthfully because your identity will not be attached to the information you are giving.

— *THANK YOU.*

SECTION 1: Demographic Characteristics of Respondents

INSTRUCTIONS: Please circle only one answer per question. If you choose other *specify*..... please write your answer in the space.

1. What is your sex?

1. Male 2. Female

2. How old are you? Indicate your age group.

1. 19-24 years 2. 25 -30 years 3. 31-36 years 4. 37-42 years and above

3. Indicate the level you teach in the school?

1. SHS1 2. SHS2 3. SHS3 4. SHS4

4. Indicate your place of residence.

1. On campus 2. Outside campus

5. What is your religious affiliation?

1. Christianity 2. Islam 3. Traditional 4. Other specify..... ...

6. What is your status in the school in terms of office holding?

1. Subject teacher 2. Housemaster/mistress 3. Form master

4. Other specify.....

7. Do you have a child who is currently in Senior High School? **If No to Question (7) skip to Question (8)**

1. Yes 2. No

SECTION 2: Kinds of Sex Educational Programmes

INSTRUCTIONS: Please circle only one answer per question. If you choose *other specify*……., please write your answer in the space.

8. Do you teach sex education in the school?

1. Yes 2. No

9. From the teaching syllabus, at what level is sex education first introduced to the students?

1. SHS1 2. SHS2 3. SHS3 4. SHS4

10. Have you ever taught a lesson in the School on abstinence from sex? **If No to**

Question (10) skip to Question (15)

1. Yes 2. No 3. Other specify……

11. What was the lesson on abstinence from sex about?

1. Abstain from premarital sex 2. Use condom during sexual intercourse

3. How to say 'NO' to sex 4. Other specify……

12. Which one of the following best describes the lesson taught on abstinence from sex?

The students understood the lesson……

1. very well 2. Well 3. A little 4. Did not understand at all

13. Do you think the lesson has an influence on the students' sexual behaviour?

1. Yes 2. No 3. Other specify.....

14. What exactly do you think is the influence on the students' sexual behaviour?

1. It encouraged them to initiate sex early

2. It encouraged them to abstain from premarital sex

3. It encouraged them to delay sex

4. It equipped them to be able to say no to sex.

5. Other specify.....

15. Have you ever taught a lesson in the school on sex resistance skills (how to say no to sex? **If No to Question (15) skip to Question (20)**

1. Yes 2. No 3. Other specify.....

16. What was the lesson on sex resistance skills about?

1. How to refuse pressures from peers to have sex 2. How to use condoms during sex

3. Abstain from premarital 4. Other specify.....

17. Which one of the following best describes the lesson taught on sex resistance skills ?

The students understood the lesson.....

1. very well 2. Well 3. A little 4. Did not understand at all

18. Do you think the lesson has an influence on the students' sexual behaviour?

1. Yes 2. No 3. Other specify.....

19. What exactly do you think is the influence on the students' sexual behaviour?

1. It encouraged them to initiate sex early.
2. It encouraged those who are sexually active to negotiate for safe sex
3. It encouraged them to delay sex
4. It equipped them with skills to say no to sex

20. Have you ever taught a lesson in the School on Contraceptive use?

If No to Question (20) skip to Question (25)

1. Yes 2. No 3. Other specify.....

21. What was the lesson on contraceptive use about?

1. How to prevent unwanted pregnancies/sexually transmitted infections.
2. How to say no to sex
3. How to abstain from premarital sex
4. Other specify.....

22. Which one of the following best describes the lesson taught on contraceptive use?

The students understood the lesson.....

1. very well 2. Well 3. A little 4. Did not understand at all

23. Do you think the lesson has an influence on the students' sexual behaviour?

1. Yes 2. No 3. Other specify.....

24. What exactly do you think is the influence on the students' sexual behaviour?

1. It encouraged them to initiate sex early 2. It encouraged those who are sexually active to use contraceptives 3. It encouraged them to delay sex 4. It discouraged those who sexually active from using contraceptives

SECTION 3: Sources of Sex-Related Information

INSTRUCTIONS: Please circle only one answer per question. If you choose *other specify*……., please write your answer in the space.

25. From whom do you think students mostly get their information on sex? **Please rank as 1st, 2nd, 3rd, etc**

1. Parents
2. Teachers
3. Health workers/Professionals
4. Family members (aunties and uncles)
5. peers/friends
6. Other specify: ……..

26. Where do you think students mostly get their information on sex? **Please rank as 1st, 2nd, 3rd, etc**

1. Internet
2. Television
3. Newspapers
4. Radio
5. Other specify……

SECTION 4: Suggested Ways to Improve Sex Education

INSTRUCTIONS: Please circle only one answer per question. If you choose *other specify*……., please write your answer in the space

27. From your experience as a teacher, at what age will you suggest sex education be taught

1. Below 10 years 2. 11-14 years 3. 15-18 years 4. Other specify ……

28. From your experience as a teacher, how do you want sex education information to be given to students? In the form of ……..

1. An advice 2. A discussion 3. A warning 4. Other specify……

29. From your experience as a teacher, indicate which one of these you think students would prefer to obtain sex- related information from.

1. Media 2. Parents 3. Peers/friends

4. Health workers/professionals 5. Teachers/School

6. Pastors/priests/Imams 7. Other specify……

THANK YOU FOR TAKING TIME TO ANSWER THE QUESTIONS

APPENDIX C

QUESTIONNAIRE FOR KEY IFORMANTSP (PARENTS)

MASTERS THESIS

SEX EDUCATION AND ADOLESCENTS' SEXUAL BEHAVIOUR OF SELECTED SENIOR HIGH SCHOOLS IN THE KUMASI METROPOLIS

By

ROBERT KUCHENGYE MOKULOGO

DEPARTMENT OF SOCIOLOGY AND SOCIAL WORK

FACULTY OF SOCIAL SCIENCES, KNUST

SUPERVISORS:

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KWAKU YEBOAH (PhD)

APPENDIX C: QUESTIONNAIRE FOR KEY INFORMANTS (PARENTS)

Hello! My name is Robert K. Mokulogo, a postgraduate student from the Department of Sociology and Social Work, KNUST. I am collecting data/information for the preparation of my thesis on **Sex education and adolescents' sexual behaviour of selected Senior High Schools in the Kumasi Metropolis.** The information you will give will be kept confidentially and used only for academic purposes. You may find some of the questions embarrassing, but I will like you to answer all the questions truthfully because your identity will not be attached to the information you are giving.

— *THANK YOU.*

SECTION 1: Demographic Characteristics of Respondents

INSTRUCTIONS: Please circle only one answer per question. If you choose

***Other specify*..... please write your answer in the space.**

1. What is your sex?

   1. Male 2. Female

2. How old are you? Indicate your age group.

1. 25 -30 years 2. 31-36 years 3.37-42 years 3. 47 and above

3. Indicate your current place of residence. Please write the names in the spaces.

   City..... Town..... village.....

4. What is your religious affiliation?

1. Christianity 2. Islam 3. Traditional 4. Other specify..... ...

5. Which of the following best describes you as a parent?

1. Single parent 2. My spouse is around 3. My spouse is staying in another place

4. Other specify.....

6. Do you have a child who is currently in Senior High School? **If No to Question (6)**

skip to Question (8).

1. Yes 2. No

7. Indicate the level in which your child is in Senior High School?

1. SHS1 2.SHS2 3. SHS3 4 SHS4

SECTION 2: Kinds of Sex Educational Programmes

INSTRUCTIONS: Please circle only one answer per question. If you choose *other specify*……., please write your answer in the space.

8. Is sex education necessary for young people?

1. Yes 2 No

9. Have you ever had discussions on sex education with your adolescents? **If No to Question (9) skip to Question (11).**

1. Yes 2 No

10. At what age did you start discussing sex education with your adolescents?

1. Below 10 years 2. Between 12-15years 3. Between 18-21 years

4. Other specify……

11. Have you ever discussed abstinence from sex with your adolescents? **If No Question (11) skip to Question (16).**

1. Yes 2. No 3. Other specify……

12. What was the discussion on abstinence from sex about?

1. Abstain from premarital sex —2. Use condom during sexual intercourse

3. How to say 'NO' to sex 4. Other specify……

13. Which one of the following best describes the discussion on abstinence from sex?

The adolescents appreciated the issues discussed .....

1. very well 2. Well 3. A little 4.Did not appreciate the issues at all

14. Do you think the discussion on abstinence from sex has an influence on your adolescents' sexual behaviour?

1. Yes 2. No 3. Other specify.....

15. What exactly do you think is the influence on the adolescents' sexual behaviour?

1. It encouraged them to initiate sex early
2. It encouraged them to abstain from premarital sex
3. It encouraged them to delay sex
4. It equipped them with skills to say no to sex
5. Other specify.....

16. Have you ever discussed sex resistance skills (how to say no to sex) with your adolescents? **If No to question (16) skip to Question (21)**

1. Yes 2. No 3. Other specify.....

17. What was the discussion on sex resistance skills about?

1. How to refuse pressures from peers to have sex 2. How to use condoms during sex
3. Abstain from premarital sex 4. Other specify.....

18. Which one of the following best describes the discussion on sex resistance skills?

The adolescents appreciated the issues discussed .....

1. very well 2. Well 3. A little 4. Did not appreciate the issues at all

19. Do you think the discussion has an influence on your adolescents' sexual behaviour?

1. Yes 2. No 3. Other specify.....

20. What exactly do you think is the influence on the adolescents' sexual behaviour?

1. It encouraged them to initiate sex early.
2. It encouraged those who are sexually active to negotiate for safe sex
3. It encouraged them to delay sex
4. It equipped them with skills to say no to sex.

21. Have you ever discussed contraceptive use with your adolescents? **If No to Question (21) skip to Question (26)**

1. Yes 2. No 3. Other specify.....

22. What was the discussion on contraceptive use about?

6. How to prevent unwanted pregnancies/sexually transmitted infections.
7. How to say no to sex
8. How to abstain from premarital sex
9. Other specify.....

23. Which one of the following best describes the discussion on contraceptive use? The adolescents appreciated the discussion……

1. very well 2. Well 3. A little 4. Did not appreciate the issues at all

24. Do you think the discussion has an influence on your adolescents' sexual behaviour?

1. Yes 2. No 3. Other specify……

25. What exactly do you think is the influence on the adolescents' sexual behaviour?

1. It encouraged them to initiate sex early.
2. It encouraged those who are sexually active to use contraceptives
3. It encouraged them to delay sex
4. It discouraged those who sexually active from using contraceptives

26. Have you ever discussed Family Planning methods/birth control methods with your adolescents? **If No to Question (26) skip to Question (30)**

1. Yes 2. No 3. Other specify……

27. What was the discussion on Family Planning Methods about?

1. Spacing of child birth
2. Abstain from premarital sex
3. How to say 'NO' to sex
4. Other specify……..

28. Which one of the following best describes the discussion on family planning methods?

The adolescents appreciated the methods ……

1. very well 2. Well 3. A little 4. Did not understand at all

29. Do you think the discussion has an influence on the adolescents' sexual behaviour?

1. Yes 2. No 3. Other specify……

30. What exactly do you think is the influence on the adolescents' sexual behaviour?

1. It encouraged them to initiate sex early.
2. It encouraged those who are sexually active to use contraceptives
3. It encouraged them to delay
4. It encouraged those who sexually active to space their children.

SECTION 3: Sources of Sex-Related Information

INSTRUCTIONS: Please circle only one answer per question. If you choose *Other specify*……., please write your answer in the space.

31. From whom do you think your children mostly get their information on sex?

Please rank as 1st, 2nd, 3rd, etc

1. Parents
2. Teachers
3. Health workers/Professionals
4. Family members (aunties and uncles)
5. peers/friends
6. Other specify: ……

32. Where do you think your children mostly get their information on sex?

Please rank as 1st, 2nd, 3rd, etc

1. Internet
2. Television
3. Newspapers
4. Radio
5. Other specify.....

SECTION 4: Suggested Ways to Improve Sex Education

INSTRUCTIONS: Please circle only one answer per question. If you choose

***Other specify*……., please write your answer in the space.**

33. At what age will you suggest sex education be taught

1. Below 10 years 2. 11-14 years 3. 15-18 years 4. Other specify ……

34. How do you want sex education information to be given to your children? In the form of

……

1. An advice 2. A discussion 3. A warning 4. Other specify……

35. Which one of these do you think your adolescents would prefer to obtain sex- related information from.

1. Media 2. Parents 3. Peers/friends

4 .Health workers/professionals 5. Teachers/School

6. Pastors/priests/Imams 7. Other specify……

THANK YOU FOR TAKING TIME TO ANSWER THE QUESTIONS

APPENDIX D

QUESTIONNAIRE FOR KEY INFORMANTS (HEALTH WORKERS)

MASTERS THESIS

SEX EDUCATION AND ADOLESCENTS' SEXUAL BEHAVIOUR OF SELECTED SENIOR HIGH SCHOOLS IN THE KUMASI METROPOLIS

By

ROBERT KUCHENGYE MOKULOGO

DEPARTMENT OF SOCIOLOGY AND SOCIAL WORK

FACULTY OF SOCIAL SCIENCES, KNUST

SUPERVISORS:

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APPENDIX D: QUESTIONNAIRE FOR KEY INFORMANTS (HEALTH WORKERS)

Hello! My name is Robert K. Mokulogo, a postgraduate student from the Department of Sociology and Social Work, KNUST. I am collecting data/information for the preparation of my thesis on **Sex education and adolescents' sexual behaviour of selected Senior High Schools in the Kumasi Metropolis.** The information you will give will be kept confidentially and used only for academic purposes. You may find some of the questions embarrassing, but I would like you to answer all the questions truthfully because your identity will not be attached to the information you are giving.

THANK YOU.

SECTION 1: Demographic Characteristics of Respondents

INSTRUCTIONS: Please circle only one answer per question. If you choose

***other specify*..... please write your answer in the space.**

1. What is your sex?

1. Male 2. Female

2. How old are you? Indicate your age group.

1. 25 -30 years 2. 31-36 years 3.37-42 years 4.47 and above

3. Indicate your current place of residence. Please write the names in the spaces.

City..... Town..... Village .....

4. What is your religious affiliation?

1. Christianity 2.Islam 3.Traditional 4Other specify.....

5. Which of the following best describes you as a parent?

1. Single parent 2. My spouse is around 3. My spouse is staying in another place

4. Other specify.....

6. Do you have a child who is currently in Senior High School? **If No to Question (6) skip to Question (8)**

1. Yes 2. No

7. Indicate the level in which your child is in Senior High School?

1. SHS1 2.SHS2 3.SHS3 4.SHS4

SECTION2: Kinds of Sex Educational Programmes

INSTRUCTIONS: Please circle only one answer per question. If you choose *other specify*……., please write your answer in the space.

8. Is sex education necessary for young people?

1. Yes 2 No

9. Have you ever had discussions on sex education with adolescents as a health professional?

If No to Question (9) skip to Question (11).

1. Yes 2 No

10. What is their age group?

1. Below 10 years 2. Between 12-15years 3. Between 18-21 years

4. Other specify……

11. As a health professional, have you ever discussed abstinence from sex with adolescents?

If No to Question (11) skip to Question (16)

1. Yes 2. No 3. Other specify……

12. What was the discussion on abstinence from sex about?

1. Abstain from premarital sex 2. Use condom during sexual intercourse

3. How to say 'NO' to sex 4. Other specify……

13. Which one of the following best describes the discussion on abstinence from sex?

The adolescents appreciated the issues discussed .....

1. very well 2. Well 3. A little 4. Did not appreciate the issues at all

14. Do you think the discussion on abstinence from sex has an influence on the adolescents' sexual behaviour?

1. Yes 2. No 3. Other specify.....

15. What exactly do you think is the influence on the adolescents' sexual behaviour?

1. It encouraged them to initiate sex early 2. It encouraged them to abstain from premarital sex 3. It encouraged them to delay sex 4. It equipped them with skills to say no to sex

5. Other specify.....

16. Have you ever discussed sex resistance skills (how to say no to sex) with adolescents as a health professional? **If No to Question (16) skip to Question (21)**

1. Yes 2. No 3. Other specify.....

17. What was the discussion on sex resistance skills about?

1. How to refuse pressures from peers to have sex 2. How to use condoms during sex

3. Abstain from premarital sex 4. Other specify.....

18. Which one of the following best describes the discussion on sex resistance skills? The adolescents appreciated the issues discussed .....

1. very well 2. Well 3.A little 4. Did not appreciate the issues at all

19. Do you think the discussion has an influence on the adolescents' sexual behaviour?

1. Yes 2. No 3. Other specify……

20. What exactly do you think is the influence on the adolescents' sexual behaviour?

1. It encouraged them to initiate sex early.

2. It encouraged those who are sexually active to negotiate for safe sex

3. It encouraged them to delay sex

4. It equipped them with skills to say no to sex.

21. Have you ever discussed contraceptive use with adolescents as a health worker?

If No to Question (21) skip to Question (26)

1. Yes 2. No 3. Other specify……

22. What was the discussion on contraceptive use about?

1. How to prevent unwanted pregnancies/sexually transmitted infections.

2. How to say no to sex

3. How to abstain from premarital sex

4. Other specify……

23. Which one of the following best describes the discussion on contraceptive use?

The adolescents appreciated the discussion……

1. very well 2. Well 3. A little 4.Did not appreciate the issues at all

24. Do you think the discussion on contraceptive use has an influence on the adolescents' sexual behaviour?

1. Yes 2. No 3. Other specify……

25. What exactly do you think is the influence on the adolescents' sexual behaviour?

1. It encouraged them to initiate sex early. 2. It encouraged those who are sexually active to use contraceptives 3. It encouraged them to delay sex 4. It discouraged those who are sexually active from using contraceptives

SECTION 3: Sources of Sex- Related Information

INSTRUCTIONS: Please circle only one answer per question. If you choose *other specify*……., please write your answer in the space.

26. From whom do you think adolescents mostly get their information on sex? **Please rank as 1st, 2nd, 3rd, etc**

1. Parents
2. Teachers
3. Health workers/Professionals
4. Family members (aunties and uncles)
5. peers/friends
6. Other specify: ……

27. Where do you think adolescents mostly get their information on sex? **Please rank as 1st, 2nd, 3rd, etc**

1. Internet
7. Television
8. Newspapers
9. Radio
10. Other specify……

SECTION 4 Suggested Ways to Improve Sex Education

INSTRUCTIONS: Please circle only one answer per question. If you choose *other specify*……., please write your answer in the space.

28. From health perspective, at what age will you suggest sex education be taught

1. Below 10 years 2. 11-14 years 3. 15-18 years 4. Other specify ……..

29. From health perspective, how do you want sex education information to be given to adolescents? In the form of ……

1. An advice 2. A. discussion 3.A warning 4. Other specify……

30. Which one of these do you think adolescents would prefer to obtain sex related information from?

1. Media 2. Parents 3. Peers/friends

4. Health workers/professionals 5.Teachers/School

6. Pastors/priests/Imams 7. Other specify……

THANK YOU FOR TAKING TIME TO ANSWER THE QUESTIONS

APPENDIX E
FOCUSED GROUP DISCUSSIONS FOR STUDENTS

MASTERS THESIS

SEX EDUCATION AND ADOLESCENTS' SEXUAL BEHAVIOUR OF SELECTED SENIOR HIGH SCHOOLS IN THE KUMASI METROPOLIS

By

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DEPARTMENT OF SOCIOLOGY AND SOCIAL WORK

FACULTY OF SOCIAL SCIENCES, KNUST

SUPERVISORS:

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KWAKU YEBOAH (PhD)

APPENDIX E: FOCUSED GROUP DISCUSSIONS FOR STUDENTS

Hello! Dear students my name is Robert K. Mokulogo, a postgraduate student from the Department of Sociology and Social Work, KNUST. I am collecting data/information for the preparation of my thesis on **Sex education and adolescents' sexual behaviour of selected Senior High Schools in the Kumasi Metropolis.** I would like to seek your views on sex education and adolescents' sexual behaviour. I will therefore urge you to participate and give as much information as possible. I will like to record the discussion on tape. The recording will only be to help me remember and not for broadcasting purposes. I once again assure you that the information you will give will be kept confidentially. If it is acceptable to you, I will start recording the discussion.

Ask for response.....

THANK YOU.

1. Students knowledge about sex education
    i. Abstinence from sex
    ii. Sex resistance skills
    iii. Contraceptive based-sex education
2. Students sources of sex-related information
    i. Interpersonal sources
    ii. Media sources
3. Students knowledge sex-related issues
    i. Pregnancy
    ii. Sexually transmitted infections
    iii. Abortion
4. Sexual behaviours
    i. Sex initiation
    ii. Contraceptive use
    iii. Number of sexual partners
5. Suggested ways to improve sex education
    i. When
    ii. How
    iii. Who

THANK YOU FOR TAKING TIME ANSWER THE QUESTIONS