SCHOOL OF PUBLIC HEALTH

COLLEGE OF HEALTH SCIENCES

UNIVERSITY OF GHANA

REPRODUCTIVE HEALTH NEEDS OF ADOLESCENT SCHOOL DROPOUTS IN THE GA EAST MUNICIPALITY

BY

EVELYN AYERKO APPIAH

(STUDENT ID. 10197519)

THIS DISSERTATION IS SUBMITTED TO THE UNIVERSITY OF GHANA, LEGON IN PARTIAL FULFILMENT OF THE REQUIRMENT FOR THE AWARD OF MASTER OF PUBLIC HEALTH DEGREE

JULY, 2012

DECLARATION

I declare that this dissertation is the result of my effort. Where needed, the works of others have been duly acknowledged.

……. Date ……...

Evelyn Ayerko Appiah (Student **ID. 10197519)**

……. Date ……...

Dr. Amos Laar (Academic Supervisor)

ABSTRACT

BACKGROUND

Adolescents represent one of the main pillars of any society. They are, however, a vulnerable group who face many challenges during this period including issues concerning their reproductive health. It is also estimated that one out of five adolescent aged 10 – 19 years has at least one serious reproductive health problem which include early pregnancy resulting in school dropout, unsafe abortion and STIs including HIV.

OBJECTIVE

This study explored the reproductive health needs, awareness and services available to adolescent school dropouts in the Ga East Municipality.

METHODS

The study was cross sectional in design and employed a quantitative data collection approach. A sample of 333 adolescent school dropouts was selected from the sub-municipalities of Ga East with the help of community guides. Statistical analysis of the data was done using PASW version 18.0. Chi square analysis was used to determine association between explanatory and outcome variables of interest.

RESULTS

The study revealed that more than half of the adolescent school dropouts (57.4%) had ever had sex with 36.7% of them not using any form of contraception. The age of respondents had a significant influence on whether they had heard of contraception. The greatest barrier to accessing reproductive health by these adolescents is lack of information. They expect the health worker to be providing such information.

CONCLUSION

Lack of adolescent friendly corners cause adolescents to have limited access to their reproductive health needs and they tend to talk to their friends/peers. This makes them vulnerable and exposes them to various reproductive health problems like unintended pregnancies, STIs and dropping out of school. Most adolescents were aware of contraception but their greatest barrier according to them to accessing this was lack of information and this is supported by a study conducted in the same municipality on in-school adolescents which also stated that though most adolescents were aware of contraception, they may be engaging in early sex as a result of lack of information (Okotah & Laar, 2012).

Keywords: Adolescent school dropouts, reproductive health needs, awareness, service provider, Ghana.

DEDICATION

This work is dedicated to Ernest, Asantewa, Abrokwah, Kwakyewa, my mother (Elizabeth) and Yaw Owusu for their love and support.

ACKNOWLEDGEMENT

I thank God Almighty for giving me the strength to bring this research to a successful end. I wish to express my profound gratitude to my supervisor, Dr. Amos Laar for his direction, construct criticisms and supervision throughout the study. I am also grateful to the District Director of Ga East Municipality (Dr. Doris Arhin) and all the staff of the four sub municipalities for their needed assistance during the study.

Special appreciation goes to my friends who in diverse ways helped for the completion of this work especially Josephine Djan, Solomon Mensah, Samuel Adjorlolo, Daniel Owusu, Nana Yaa Konadu Gyesaw and Vida O. Arhin. Finally I thank all the adolescents for their cooperation during the administration of the questionnaires as well as all those who have not been mentioned but have significantly contributed to the success of this research. To all I say God richly bless you.

TABLE OF CONTENTS

LIST OF FIGURES

LIST OF TABLES

LIST OF ABBREVIATIONS

AIDS	Acquired Immune Deficiency Syndrome
AYA	African Youth Alliance
FHI	Family Health International
GDHS	Ghana Demographic Health Survey
GSS	Ghana Statistical Service
HIV	Human Immunodeficiency Virus
JHS	Junior High School
NGO	Non-Governmental Organisation
NSFG	National Survey of Family Growth
PASW	Predictive Analytics Software
PIP	Population Information Programme
RHN	Reproductive Health Needs
RHO	Reproductive Health Outlook
SHS	Senior High School
SRS	Simple Random Sampling
STIs	Sexually Transmitted Infections
UNAIDS	United Nations Programme on HIV and AIDS
UNESC	United Nations Economic and Social Council
UNICEF	United Nations International Children's Emergency Fund
WHO	World Health Organization

CHAPTER ONE

1.0 INTRODUCTION

1.1 Background of Study

Adolescents represent one of the main pillars of any society. According to MacKay and Duran (2007), the term 'adolescent' can vary in scope and age and ranges from puberty to adulthood, often ages 10 to 21. The WHO (2011), however, defines the term as a person aged between the ages of 10-19 years.

During adolescence, an individual makes a gradual transition from being a child to becoming an adult (Arnett, 2001). It is a challenging phase of life, within which the individual attains physical, sexual and social maturity. During these years, following puberty, young people gradually mature to become adults, but do not generally assume the privileges, roles and responsibilities commonly associated with adulthood. Chassin (1997) estimated that one out of five adolescents aged 10-19 has at least one serious health problem. Within the adolescent population, some groups have specific needs and/or vulnerabilities (WHO, 1999). In the year 2000, it was estimated that 404 million people or 38% of youth under the age of 18 in developing countries do not attend school (Boyd et al., 2000).

These youths are vulnerable to sexual exploitation and are, thus, at a high risk of negative reproductive health outcomes. That is most adolescents begin to explore their sexuality and have sexual relationships, which expose them to sexual and reproductive health problems. These include early pregnancy resulting in school dropout, unsafe abortion and Sexually Transmitted Infections (STIs) including HIV. In addition, in some cultures, girls face genital mutilation and its consequences; difficult labour. They often lack access to health information, counseling, legal

protection as well as health care. According to Muula (2008), "teenage girls who get pregnant are likely to drop out from school and teenage parents are unlikely to have the social and economic means to raise children". Most of these pregnancies are unintended and these individuals are usually faced with health issues involving the mother and the baby. The linkage between age at first childbirth and education is clear. Sixty percent of teenage girls with no education have become mothers or are pregnant with their first child compared to 33% of those with some primary education and only 17% of those who attended secondary school (AYA, 2001).

Adolescents appear to be poorly informed with regard to their own sexuality, physical well-being, health and bodies. Whatever knowledge they have is usually inadequate. Low rates of educational attainment, limited sex education activities and inhibited attitudes toward sex contribute to this ignorance (Barkat et al., 2002). In many parts of the world the sexual and reproductive health needs of adolescents are either poorly understood or not fully appreciated. Evidence is growing that this neglect can seriously jeopardize the health and future well-being of young people (WHO 2006; Bott et al., 2003).The study therefore sought to assess the reproductive health needs and awareness of adolescents in relation to their sexual and reproductive health status and the services available to them in the Ga East Municipality.

1.2 Statement of Problem

According to the population and housing census conducted by the Ghana Statistical Service (GSS), the population of Ghana has increased from 18,912,079 in 2000 to 24,223,431 in 2010 (provisional census figures) which also shows an increase in the population of adolescents (GSS, 2011). Alemayehu et al. (2006) reported that out of school adolescents have a relatively high

sexual activity rate of thirty to sixty percent and the most important reproductive health problem they face is early marriage.

Figures given by the 2010 annual report of the Ga East Municipal Health Directorate showed that there was an increase in teenage pregnancy in the early teens (10-14 years) from two in 2009 to ten in 2010 (Annual Report for Ga East, 2010). This suggests that adolescents have problems with their reproductive health needs in the municipality. This report reveals a 5-fold increase: one and five incidence in 2009 and 2010 respectively for HIV infection among adolescents between 15 and 19 years. Whether or not reproductive health services are available to out of school adolescents, whether they are aware of reproductive health issues, and whether their reproductive health needs are met in the municipality were issues worth investigating. This study therefore assessed the reproductive health needs and knowledge of adolescents in relation to their sexual and reproductive health status and the services available to them in the municipality.

1.3 Significance of the study

To know whether adolescents were adequately aware of their reproductive health needs, a study like this is necessary. Findings from the study will help authorities of the health institutions to address and provide solutions to adolescents' health needs. It will also provide adolescents with good education on their Reproductive Health Needs (RHNs) to help reduce reproductive and sexual problems like STIs.

1.4 OBJECTIVES

1.4.1 General Objective

To explore the reproductive health needs, awareness, and services available to adolescents school dropouts in the Ga East Municipality.

1.4.2 Specific Objectives

1. To determine the reproductive health needs of adolescent school dropouts in the municipality
2. To determine the awareness of adolescent school dropouts on reproductive health issues
3. To document the various reproductive health services available to adolescent school dropouts in the municipality.

CHAPTER TWO

2.0 LITERATURE REVIEW

Adolescence, being a transitional phase from childhood to adulthood tends to be marked by the rapid beginning of reproductive maturity and is a relatively new concept in developing countries (Rondini & Krugu, 2009). During this period, adolescents strive to establish independence from parents, create and maintain relationships with peers, and try to complete their formal schooling and take their place in the society. As a result of striving to achieve independence and maintain relationships with peers, most adolescents lose their education and end up with a lot of reproductive health problems which go a long way to affect their future dreams.

2.1 Adolescent School Dropout

Timar, Biag and Lawson (2007) recorded that in spite of educators' effort to making schooling appealing and friendly to students' interest and aspirations, the ability of schools to hold students through high school graduation has varied considerably over time. They identified the following individual predictors of school dropout among adolescents: pregnancy, poor academic performance, absenteeism and discipline problems, high rates of mobility (both residential and school mobility) and employment. In addition to the student or individual factors that predict dropping out, there are a number of institutional variables such as family factors (parent income and education level), and school policies and practices (academic and social climate) that also result in school dropout (Timar et al., 2007).

Dropping out is defined by two dimensions namely; academic engagement and social engagement (Fredricks, Blumenfeld & Paris, 2004; Newman, Wehlage & Lamborn, 1992). The

former involves student attitudes and behaviors with respect to the formal aspects of schooling - classrooms, curricula, and activities - while the latter includes informal aspects of schooling - peer and adult relationships (Rumberger, 2004). The reason for an adolescent not liking school may relate to social reasons like teasing and bullying while for another it may stem from boredom or a succession of teachers whom the student did not like. A key factor for some students dropping out might be due to poor attendance, inability to keep up with the school work, or any number of other reasons that may have nothing to do with school (Timar et al., 2007). However, according to Rumberger (2004), dropping out is not simply a result of academic failure, but rather a consequence of both academic and social problems in school, often originating in the family and community.

2.2 Reproductive Health Needs

The Ghana Demographic and Health Survey conducted in 2003 recorded that about half the total population is below 15 years and adolescent reproductive health is receiving maximum attention with the prominent social and health issues being teenage pregnancy. What has increased the risk for non-marital pregnancy and exposure to STIs is early initiation and non-use of contraceptives, resulting in high cost on the society (Rondini & Krugu, 2009).

The reproductive health crisis faced by adolescent school dropouts arises basically from the increase of early and premarital sexual behavior which leads to teenage pregnancy, illegal abortions and STD, including HIV and AIDS (Pathfinder International, 1999). Social consequences attached to accessing reproductive health needs by adolescent school dropouts in

relation to their sexual activity results in unintended pregnancy, unsafe abortion and STIs including HIV and AIDS. These are major health and social problems experienced in many developing countries (PIP, 1995). Early childbearing continues to be an impediment to improvements in the educational, economic and social status of adolescent young women in all parts of the world (UNESC, 2001). Many adolescent who engage in sexual activities before marriage, often do not use any of the modern contraceptives (contraceptive pills, condoms, IUD, jadelle, injectables) thereby exposing them to the risks of sexually transmitted infections, HIV and AIDS and unplanned pregnancy (UNICEF, 1997).

For most people, sexual activity begins in adolescence (Abubeker, 2004). In many developing countries, unmarried adolescents are sexually active before the age of 15. A survey conducted by UNICEF, UNAIDS and WHO (2002) using adolescent boys aged 15 to 19 years in Brazil, Hungary and Kenya found that more than a quarter reported having sex before attaining age15. Another study conducted in Bangladesh found that 88% of unmarried urban boys and 35% of unmarried urban girls had engaged in sexual activity before attaining age18 (UNICEF, UNAIDS & WHO, 2002).

2.3 Awareness of Reproductive Health

According to Alemayehu et al. (2006), adolescents, particularly out of school adolescents, do not have access to health promotion information, counseling, legal protection, health care and other social services. They also observed that one out of five adolescents (10-19 years) have at least a serious health problem. Rural out of school adolescents (prevalent in their study population) were noted to be at the greatest risk of sexual and reproductive health problems such as the rapid

spread of HIV and AIDS and high morbidity as a result of early and unprotected sexual activity and misconceptions about HIV and AIDS. Some recommendations made were that appropriate programs to prevent HIV and AIDS and promote reproductive health should be designed for adolescent dropouts. Focus should be put on improving the level of education and increasing the age at marriage through community education and law enforcement mechanism as long term policy. Accessibility and organization of reproductive health services should be made in acceptable ways to prevent the effects of early and unprotected sexual activities and misconceptions.

A study conducted in the United States found that most of the teens aged between 15 and 19 have received some formal instruction on saying no to sex before the age of 18years (NSFG, 2002). However, 69.9% females and 66.2% males who form a smaller majority reported having received instruction on birth control methods. Incidence in sexually transmitted diseases among the age group, however, remains high despite this education (Gebhart & Coy, 2007). The use of contraceptive methods increases with increasing level of education. For instance 30% of married women with secondary or higher level of education are using a method of contraception compared to 14% of married women with no education (GSS et al., 2009).

Young people are highly aware of contraceptives and where they can be obtained. Result from the Ghana National Youth Reproductive Health Survey (1998) as cited by Tweedie & Witte, 2000 shows that from ages 15 to 19 years, females and males forming 76% and 88% respectively were aware of at least a modern method of family planning with condom being the most

commonly known method. Agyei et al. (1992) however stated that in spite of the high level of awareness in contraception, its use is relatively low. In support of this, Awusabo-Asare et al. (2004) reports that though most adolescents are aware of contraceptive methods, their incorrect use will cause their effectiveness against pregnancy and STIs to still be low.

2.4 Reproductive Health Services

The Ghana Demographic and Health Survey conducted in 2003 recorded that adolescent reproductive health is receiving increased attention in Ghana, with almost half of the population below 15 years with teenage pregnancy being a prominent social and health issue. According to Rosen (1996) and Strasburger (1997), researchers have found that out of school adolescents often have had limited exposure to reproductive health services. Since the adolescent phase is associated with health risks, health professionals need to understand the physical, cognitive and psycho-social components of adolescent growth and development. This will serve as a basis for comprehensive history-taking, physical examination and health guidance/counselling to improve the health and welfare of adolescents. This role to be performed by health professionals, however, does not seem to be adequate to prepare adolescents during this period. This usually results in their inability to complete their education which indicates limited knowledge on family planning methods (WHO, 2011).

The GDHS (2008) report indicated that 18% of women aged 15-19 began using contraceptives before having any child compared to 5% of women aged 40 - 45. This shows that Ghanaian women use contraceptives at an early age to delay child bearing. According to Temin and Levin

(2009), to remove age and marital status barriers to service provision, there is the need for a responsive national adolescent health policy to help train providers in working effectively with adolescents to ensure that comprehensive sexual and reproductive health services are available, accessible, affordable and adolescent-friendly. The 2010 Annual Report of Ga East Municipality indicated that none of the health facilities has adolescent 'corner' and 579 adolescents also presented with pregnancy. Most adolescents did not seek reproductive health because they did not want to be seen by anyone and usually felt embarrassed for needing reproductive health services.

The diversity of experience among adolescents require reaching them with a range of sexual and reproductive health information and services before they initiate it, as sexually active unmarried youth, or as married individuals and couples (Ringheim & Gribble, 2010). According to WHO (2011), "some reproductive health services provided to adolescent school dropouts are education on depression or anxiety and on sexual and reproductive health issues including sexual preferences, gender identities, counselling and appropriate treatment or referral (medical, legal, social) for girls and boys who have been raped, or physically or sexually abused, or are victims of other forms of violence, coercion, or harmful practices such as forced marriage or female genital mutilation, provision of methods including oral contraceptives, injections, male and female condoms, and emergency contraception".

Pathfinder International (2008) indicates that pregnancy tests and provision of antenatal, delivery and postpartum care, with special attention to the needs of younger girls and those pregnant for

the first time; pre and post-abortion counselling and provision of referrals for safe abortion should be made available to adolescents. Dehne and Riedner (2005) also states that information should be given on the prevention of HIV and AIDS and STIs including dual-protection strategies, STI diagnosis and syndromic management, pre and post-test HIV counselling and referrals for testing, treatment, and partner notification. "The utilization of services by adolescents can be greatly increased by training health workers to be non-judgmental and empathetic, making health facilities user-friendly and obtaining the support of community leaders for the provision of health services to adolescents" (WHO, 2003).

When preferences of adolescents are addressed on different attributes of health services, it would maximize the health service utilization rate and help reduce school dropout rates among adolescents. Ensuring the involvement of adolescents together with the community and government agencies in planning, implementation and evaluation of interventions meant for them would be a prerequisite for the successful implementation of adolescent reproductive health services (Senderowitz, 2000; RHO, 2000).

CHAPTER THREE

3.0 METHODOLOGY

3.1 Type of Study/Design

The study was cross-sectional descriptive in design and employed quantitative data collection approach.

3.2 Study Location/Area

The Greater Accra Region located in the south-central part of the country is the smallest of the 10 administrative regions in terms of area. The area under discussion in this research focused on the Ga East Municipality which is boarded on the north by the Akuapem South District, the west by the Ga West District, the south by the Accra Metropolis District and the east by the Tema Municipal District and covers an area of 166sq/km of land. The municipality has 4 sub municipalities namely Madina, Danfa, Taifa and Dome with thirty-four communities comprising mixed settlements, urban, peri-urban and rural areas and residents are predominantly public servants and traders with a few who are into farming and craftsmanship. Urban settlement forms 80% of the municipality. The total population is 320,853 and has a growth rate of 4.0%.

The municipality experiences two main climatic conditions which are the dry and rainy seasons. The two major festivals celebrated by the residents are Homowo (by the Boi-Teiman and the other communities) in conjunction with residents of Teshie and La and Dokobi (by Sessemi inhabitants).

3.3 Variables

The variables assessed and measured included the following:

Age of adolescent, level of education before dropping out of school, age at involvement in sex related activities, awareness of reproductive health, reproductive health needs and services available in the municipality.

3.4 Study Population

For the purpose of this study, emphasis was on adolescent school dropouts in the municipality aged between 10-19 years who were living in the four sub municipalities.

3.4.1 Inclusion and exclusion criteria

The study included all out of school adolescents aged 10 to 19 years residing in the municipality. Eligible adolescents whose legal guardians do not wish to provide proxy consent were excluded even if they are willing to be part of the study and vice versa.

3.5 Sampling Procedures

The intended sampling procedure was systematic random sampling where the 12 principal towns in these sub-districts would have formed clusters and the various households in the communities identified with the help of documentation from the Municipal Assembly. Using the register of adolescent school dropouts from the four sub-district offices, an adolescent would have been randomly selected from a household if there was more than one and where there was no adolescent the next house would have be systematically selected to obtain the required participants. This was however not used as planned because of the absence of a register on these

adolescents in the municipal assembly and the district education office. The study participants were therefore conveniently selected from the four sub municipalities of the Ga East Municipality through the home visit and outreach schedule drawn for the sub-municipalities by the community health workers. With the help of community guides, any adolescent identified who met the study's inclusion criteria was interviewed. Adolescents who were interviewed also assisted in identifying more of their peers.

3.6 Sample Size Computation

The sample size for this study was determined taking the following factors into consideration;

- Estimated proportion of the variables of interest (the level of reproductive health awareness, the specific reproductive health needs of adolescent school dropouts in the setting) was unknown. The findings of a similarly designed study implemented in the district in 2011(Okota and Laar, 2012) but among in school adolescents was used. This study revealed a high familiarity (74.9%) of modern contraceptives and sex education among the adolescents.
- Desired level of confidence, in this case 95% confidence level (standard value of 1.96)
- Acceptable margin of error – 5% (standard value of 0.05)

Then relying on the formula based on the simple random sampling:

$$n = \underline{Z^2\ P(1-P)}/d^2$$

Where n = minimum required sample size

d= margin of error at 5%

z= confidence level at 95%

p= proportion of out of school adolescents who are aware of reproductive health issues

Therefore n = $[(1.96)^2 0.75 \times 0.25]/(0.05)^2 = 147$

However, since sampling was not to be based on simple random sampling (SRS), the value of n was multiplied by the design effect of 2.

Which implied that n = 147 x 2 = 294. This sample size is further increased by 5% to account for contingencies such as non-responses or recording errors. Final sample size = 294 + 15 = 309. This figure is rounded up to 310.

3.7.0 Data Collection Techniques/ Methods

The study employed a quantitative data collection approach. The principal investigator was assisted by trained research assistants in the administration of the structured questionnaires.

3.7.1 Data collection tool

Structured questionnaire was the main tool used for interaction between the researcher and the research participants.

3.8 Data Processing and Analysis

Statistical analysis of the data was done using PASW Statistics 18, Release Version 18.0.0.Statistical tools such as frequency distribution tables, charts and cross tabulation was used. The frequency tables and cross tabulation gave the summary of data for easy understanding

while the charts showed diagrammatic representation of responses. Analysis looking at the associations between certain demographic attributes of the adolescents and reproductive health needs was tested using the Chi Square test. Statistical significance was set at p value less than 0.05.

3.9 Ethical Consideration

Ethical clearance was obtained from the Ghana Health Service (GHS) Ethical Review Committee (Appendix 2). In addition, permission was sought and obtained from the appropriate authorities of the sub municipalities to be involved in the study. Oral consent was sought from participants after detailed explanation of what the study entailed was rendered. For the purpose of confidentiality, participants were required to answer questionnaire without their names being written for honest response to provide them with good education on their RHNs and help reduce reproductive and sexual problems like STIs.

Participation was on voluntary basis and the adolescents were told they could terminate the interview at any time without any penalty. For those younger than 18 years, proxy consent was sought from their legal guardians. Details on this sub-section are given in Appendix 1 – the informed consent form.

3.10 Pretesting

The questionnaires were pretested at Abokobi, one of the towns which did not form part of the research sites. Selected adolescent school dropouts were interviewed with questionnaire and the necessary modifications were done prior to the actual data collection.

3.11 Quality Control

In order to achieve this, a well designed structured questionnaire containing all the details necessary to achieve the set objectives by obtaining the right information from school dropout was used. Prior to the collection of data, a day's training was organized for field workers who were to help with the collection of data. There was daily checking and monitoring of questionnaire administered by the research supervisor to ensure completeness and consistency.

CHAPTER FOUR

4.0 RESULTS

4.1 Characteristics of adolescent school dropouts

The study explored the awareness of out of school adolescents in the Ga East Municipality on reproductive health; documented the reproductive health needs of the adolescents as well as the reproductive health services available to them. This report is based on the views of 333 adolescent school dropouts.

Two hundred and fifteen (64.6%) of the 333 respondents were resident of Madina sub-municipality. Ninety four (14.7%) and 44 (13.2%) were residents of Dome and Taifa respectively whilst only 25 (7.5%) of the respondents were from Danfa (Table 1). Majority of the respondents, 251 (75.4%) were within the age group 15-19 years (late adolescents) and 82 (24.6%) fell within the age group of 10-14 (early adolescents). Overall, the mean age of the respondents was 16.2 years with a standard deviation of ± 2.3.

A total of 252 (75.7%) females were interviewed whilst the males were 81 (24.3%). More than half of the respondents 178 (53.5%) dropped out of school at the primary level with those dropping out at the JHS and SHS level forming 34.8% and 11.7% respectively. Respondents who lived with their parents were 141 (42.4%) and those living with relatives other than their parents were 136 (40.8%). Those who lived with friends were 39 (11.7%) and 17 (5.1%) indicated they lived alone. About 155 (46.5%) reported that they were currently in a sexual relationship whilst

178 (53.5%) were not currently in a sexual relationship. Other relevant socio-demographic attributes of the adolescents are detailed in Table 1.

Table 1: Characteristics of adolescent school dropouts (n = 333)

Characteristic	Frequency	Percent
Residence		
Madina	215	64.6
Dome	49	14.7
Taifa	44	13.2
Danfa	25	7.5
Age (years)		
10-14	82	24.6
15-19	251	75.4
Sex		
Male	81	24.3
Female	252	75.7
Religion		
Christian	205	61.6
Moslem	119	35.7
No religion	9	2.7
Dropped out of school at		
Primary	178	53.5
JHS	116	34.8
SHS	39	11.7
Living with		
Parent	141	42.3
Other relatives	136	40.8
Friend	39	11.7
Alone	17	5.1
Sexual relationship status		
Currently in a relationship	155	46.5
Not currently in a relationship	178	53.5
Working status		
Currently working for pay	119	35.7
Not currently working for pay	214	64.3

4.2 Reproductive health history of adolescent school dropouts

It was evident that more than half of the respondents 191 (57.4%) have ever had sex with 52 (27.2%) and139 (72.8%) being in the early and late adolescence respectively. Only 89 (46.6%) of them used condom during sex, 25 (13%) used contraceptive pills, 7 (3.7%) used injectables and 70 (36.7%) did not use any form of contraceptive. Close to 70% of the adolescents currently had a sexual partner with about 11% having two or three sexual partners (Table 2).

Out of the 252 female respondents, 105 (61.4%) had ever been pregnant with almost 23 (13.5%) being pregnant during the time of the interview. Almost 13 (12.4%) of respondents became pregnant during early adolescence. Out of these pregnancies, those who gave birth, had abortion or had miscarriage were 70 (60.7%), 27 (25.7%) and 8 (7.6%) respectively. More than half 15 (55.6%) of these abortions were self induced.

Table 2: Reproductive health history of adolescent school dropouts[1]

Variables	Frequency	Percent
Ever had sex		
Yes	191	57.4
No	142	42.6
Age at first sexual intercourse		
10-14	52	27.2
15-19	139	72.8
Total	191	100
Use of modern contraceptives during sex		
Contraceptive pills	25	13
Condoms	89	46.6
Injectables	7	3.7
None	70	36.7
Total	191	100
Number of current sexual partner(s)		
None	38	19.9
One	132	69.1
Two	14	7.3
Three or more	7	3.7
Total	191	100
Ever been pregnant		
Yes	105	61.4
No	66	38.6
Total	171	100
Age of first pregnancy		
10-14	13	12.4
15-19	92	87.6
Total	105	100
Outcome of last pregnancy		
Gave birth	70	66.7
Had abortion	27	25.7
Miscarriage	8	7.6
Total	105	100.0
Person who performed abortion		
Self-induced	15	55.6
Gynaecologist	9	33.3
Quack person	3	11.1
Total	27	100.0
Currently pregnant		
Yes	23	13.5
No	148	86.5
Total	171	100
Number of children		
None	118	35.5
One	69	20.7
Two	4	1.2
NA[2]	142	42.6

[1]n = 333 unless otherwise indicated [2]NA = Not applicable

4.3 Reproductive health needs of adolescent school dropouts

More adolescents (96.4%) indicated they needed information on HIV and AIDS followed by information on STIs (89.8%). About 83% of the respondents indicated they needed information on contraception whilst 79% also indicated sexual abuse/violence. Almost 78% of the adolescents indicated they needed information concerning preventing early pregnancy and 67% on nutrition. However, adolescent school dropouts who needed information on post abortion care were 54.7%, antenatal, intra and post natal care (52.3%) and delivery services 51.7% respectively.

It is shown that 94 (28.2%) had ever visited a health facility for reproductive health services. The facilities visited were drug stores/pharmacy 60 (63.8%), government hospitals/clinics 20 (20.3%) and private hospitals/clinics 6 (6.4%). Others, however, sought services from a combination of the mentioned facilities. For 59 (17.7%) of the adolescents, it took more than 15 minutes to access reproductive health service while for 11(3.3%) it took between 15-30 minutes. Reception for 81 (24.3%) of the adolescents was friendly while for 13(3.9%), reception was unfriendly. Eighty-seven (26.1%) had their reproductive health need met compared to 7 (2.1%) who did not. The greatest fear in the adolescent period stated was HIV and STIs 173 (52%), pregnancy 131 (39.3%) and peer influence 16 (4.8%). Their greatest barriers in assessing reproductive health services were lack of information on the issue, inability to talk to parents about reproductive health issues and time constraints representing 34.5%, 33.9% and 12.6% respectively (Table 3).

Table 3: Reproductive health needs of adolescent school dropouts[1]

Variables	Frequency	Percent
Reproductive health needs[2]		
Contraception	276	82.9
Nutrition	223	67.0
Sexual abuse/ violence	263	79.0
Post Abortion Care	182	54.7
Delivery Services	172	51.7
HIV/AIDS	321	96.4
Antenatal, Intra and Postnatal Care	174	52.3
Preventing Early Pregnancy	258	77.5
STIs	299	89.8
Ever visited a health facility for services		
Yes	94	28.2
No	239	71.8
Facility which offered reproductive health services		
Government hospital/clinic	19	20.2
Private hospital/clinic	6	6.4
Drug stores/ Pharmacy	60	63.8
Access from one or more facilities	9	9.6
Total	94	100
Time taken to access reproductive health service		
NR	15	16
<15mins	59	62.7
15-30mins	11	11.7
>60mins	9	9.6
Total	94	100
Reception of adolescent at the facility		
Friendly	81	86.2
Unfriendly	13	13.8
Total	94	
Facility being able to meet reproductive health need		
Yes	87	92.5
No	7	7.5
Total	94	100
Greatest barriers in accessing reproductive health services		
Time constraints	42	12.6
Lack of information on the issue	115	34.6
Lack of interest or poor health literacy from parent	34	10.2
Lack of comprehensive family life education in schools	29	8.7
Inability to talk to parents about reproductive health issues	113	33.9

[1]n = 333 unless otherwise indicated

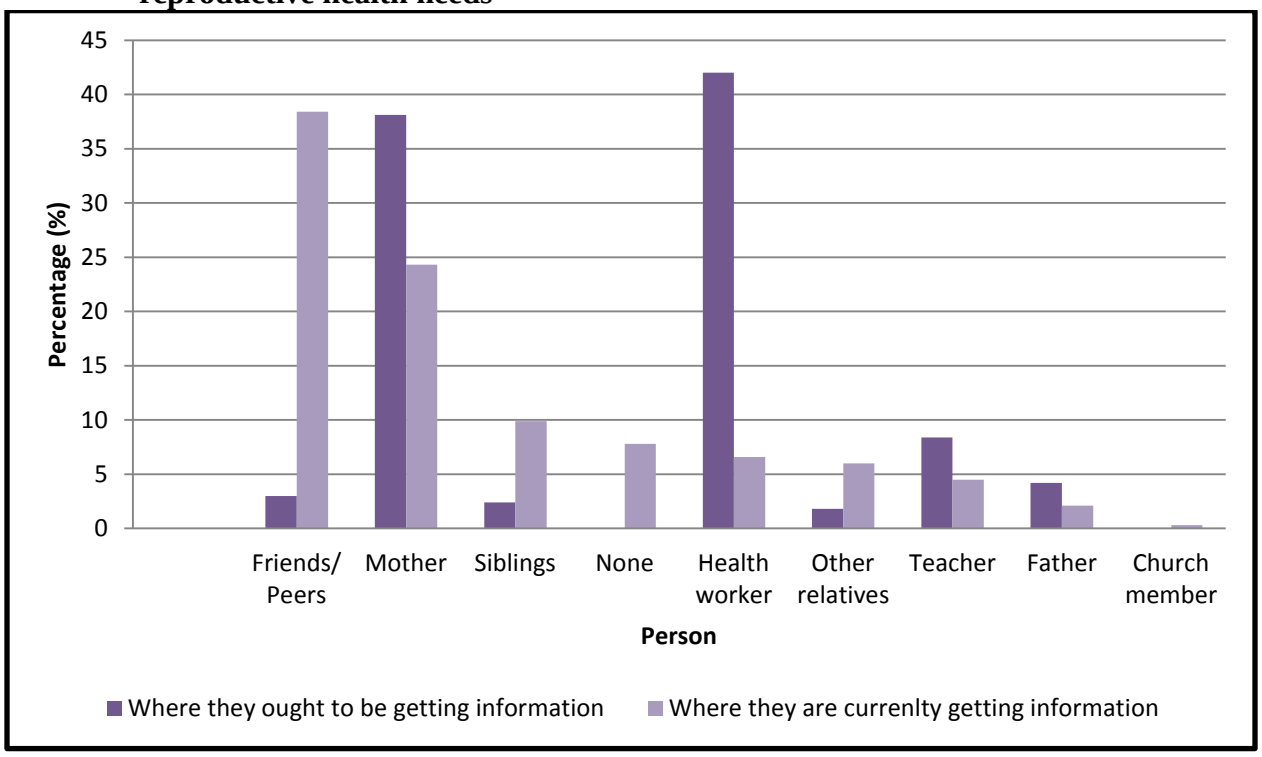
[2]n = percentage do not sum to 100%; only the affirmatives are reported for the variables

4.4 Adolescent school dropouts' current and perceived source of information on reproductive health needs

When respondents were asked to indicate the person they talked to about their reproductive health needs, 128 (38.4%) of them talked to their friends/peers, even though only 3% of the adolescents felt peers should be providing them with information. Eighty-one (24.3%) reported talking to their mothers' even though 38.1% indicated mothers should be providing them with information. Thirty-three (9.9%) also indicated they sought reproductive health information from their siblings when only 2.4% wished to receive information from them.

Twenty-eight (8.4%) also suggested the teacher should be the person to provide information on health issues when in actual fact only15 (4.5%) were able to talk to their teachers when they were in school. Fathers made up 7 (2.1%) and 14 (4.2%) of who adolescents sought and thought should receive information from respectively and only an adolescent source of information was from a church member. Figure 1shows other details regarding where adolescents were currently getting information on reproductive matters versus where they felt this information should be sought.

Figure 1: Adolescent school dropouts' current and perceived source of information on reproductive health needs



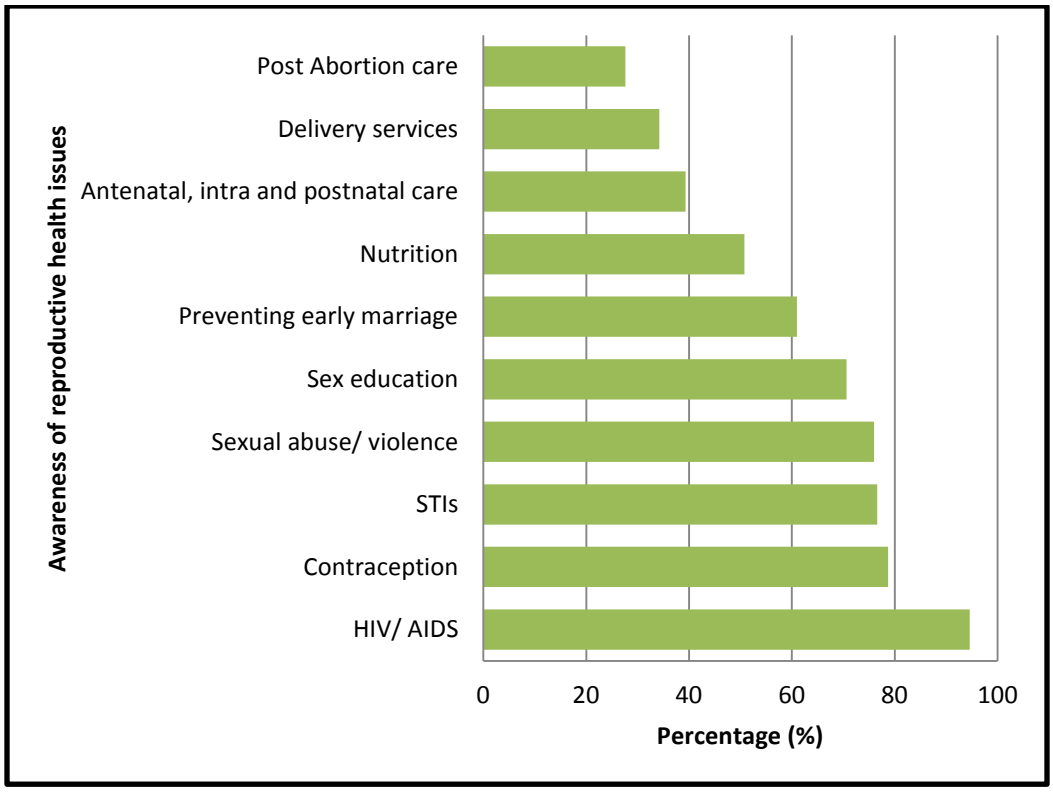
4.5 Awareness of reproductive health issues by adolescent school dropout

Responses were given by adolescent school dropouts on the awareness of reproductive health issues of which majority 315 (94.6%) was for HIV and AIDS. Contraception, STIs and sexual abuse/violence formed 262 (78.7%), 255 (76.6%) and 253 (76%) respectively of responses made. Similarly post abortion care and nutrition formed 203 (61%) and 169 (50.8%) of responses respectively. Only 131 (39.3%), 114 (34.2%) and 92 (27.6%) of the adolescents were aware of antenatal, intra and postnatal care, delivery services and post abortion care services respectively.

Almost 50% out of 235 (70.6%) of the respondents indicated they had heard of sex education mentioned the teacher as their main source of information while others also had information from friends/peers (26.4%), media (16.2%) and parent (12.3%). Out of the 296 (88.9%) of

adolescents who had heard of menstruation, 80% had experienced this with about 45% of them stating the experience was normal and 33.6% experiencing pain. Some adolescent school dropouts indicated that pregnancy can be prevented by abstaining from sex (20.8%), condom use (12.9%) and oral contraceptives (4.2%) while others stated a combination of all these can also prevent pregnancy (Figure 2).

Figure 2: Awareness of reproductive health issues by adolescent school dropout



4.5.1 Associations between selected characteristics of adolescents and their awareness of reproductive health issues

Looking at the residence, age and level of education the adolescents dropped out of school and whether they had heard of contraception, STIs and sex education, Chi square (X^2) analysis was done and are presented in Table 4. The result of the analysis showed a significant association between awareness of contraceptives and sub-municipalities(X^2 =23.683, p < 0.001).

Respondents from Madina sub-municipality were significantly more aware compared to respondents from Danfa, Dome and Taifa sub-municipalities. However, no significant association was, observed between respondent's sub-municipality of residence and awareness of STIs issues ($X^2_{(3)}$=4.115, p = 0.249) or sex education ($X^2_{(3)}$= 4.717, p = 0.194).

The age of the respondents was also associated with awareness of contraception. Respondents aged 15 years-19 years significantly indicated having heard of contraception ($X^2_{(1)}$=13.709, p < 0.001), STIs ($X^2_{(1)}$=13.709, p < 0.001),and sex education $X^2_{(1)}$=9.201, p =0.002) compared to those younger than 15 years.

The analysis indicates no significant difference ($X^2_{(2)}$=1.799, p = 0.407) on the level of education (Primary, JHS, SHS) at which adolescents dropped out of school and having heard of contraception. No significant difference ($X^2_{(2)}$=3.633, p = 0.163) was also observed when the respondents who dropped out of school at the primary, JHS and the SHS were asked whether they have heard of STIs. This means that responses of the adolescent school dropouts at the primary, JHS and the SHS level did not on from whether they have heard of contraception and STIs. There was, however, a significant difference ($X^2_{(2)}$=22.233, p < 0.001) when the respondents responded to whether they have heard of sex education.

Table 4: Associations between selected characteristics of adolescents and their awareness of reproductive health issues

	N (%)		Chi square (df)	P value
	Heard of	**Contraception**		
Residence	**Yes**	**No**		
Madina	179 (64.9)	36 (63.2)	23.683 (3)	<0.001
Danfa	13 (4.7)	12 (21.1)		
Dome	41 (14.8)	8 (14.0)		
Taifa	43 (15.6)	1 (1.7)		
Age of respondent				
10-14	57 (20.7)	25 (43.9)	13.709 (1)	<0.001
15-19	219 (79.3)	32 (56.1)		
Dropped out of school at				
Primary	143 (51.8)	35 (61.4)	1.799 (2)	0.407
JHS	100 (36.2)	16 (28.1)		
SHS	33 (12)	6 (10.5)		
	Heard of	**STIs**		
Residence				
Madina	192 (64.2)	23 (67.7)	4.115 (3)	0.249
Danfa	20 (6.7)	5 (14.7)		
Dome	46 (15.4)	3 (8.8)		
Taifa	41 (13.7)	3 (8.8)		
Age of respondent				
10-14	65 (21.7)	17 (50.0)	4.136 (1)	<0.001
15-19	234 (78.3)	17 (50.0)		
Dropped out of school at				
Primary	155 (51.8)	23 (67.6)	3.633 (2)	0.163
JHS	109 (36.5)	7 (20.6)		
SHS	35 (11.7)	4 (11.8)		
	Ever heard of	**sex education**		
Residence				
Madina	147 (62.5)	68 (69.4)	4.717 (3)	0.194
Danfa	15 (6.4)	10 (10.2)		
Dome	39 (16.6)	10 (10.2)		
Taifa	34 (14.5)	10 (10.2)		
Age of respondent				
10-14	47 (20.0)	35 (35.7)	9.201 (1)	0.002
15-19	188 (80.0)	63 (64.3)		

Dropped out of school at				
Primary	108 (46.0)	70 (71.4)	22.233 (2)	<0.001
JHS	90 (38.3)	26 (26.6)		
SHS	37 (15.7)	2 (2.0)		

4.6 Reproductive health services available to adolescent school dropouts

To find out about the reproductive health services available to the adolescent school dropouts, data was gathered from the heads of the reproductive health units of the four sub municipalities.

The result showed that all the sub municipalities have reproductive and child health units but not adolescent friendly corners. They, however, offer information and services on the following reproductive health issues to adolescents who come to the facilities for assistance. These are contraception, nutrition, abortion services, HIV and AIDS, antenatal, intra and postnatal care, preventing early marriage and STIs. None of these facilities, however, offer services on sexual abuse/violence. According to the facility heads, barriers in accessing these services available to them were attributed to lack of privacy, shyness and fear of being called a bad boy/girl.

CHAPTER FIVE

5.0 DISCUSSION

5.1 Background Characteristics

The study sought to explore the reproductive health needs and services available to adolescent school dropouts residing in the Ga East Municipality, Accra. The majority (64.6%) of the adolescents were residents of Madina. Madina is relatively densely populated with this category of adolescents partly because of the commercial activities in that area which attract residents in other areas to migrate accounting for the high number of respondents in the study. The remaining respondents were from Dome, Taifa and Danfa which are all sub municipalities of the Ga East Municipality.

Almost 76% of the respondents in the study were females. More females dropping out of school than males could be because they are more vulnerable and find it difficult talking about their problems with their parents. They end up talking to people who do not have sufficient information for them example friends which later ruins them. About 75% of the respondents were within the age range of 15 to 19 years and 25% were within the age range of 10 to 14 years. This supports the findings made by Alemayehu et al. (2006) who found that majority of adolescent school dropouts in East Gojjam, Ethiopa were within the age range of 15 to 19 years (74.4%) and the remaining were within the ages of 10 to 14 years (25.6%). The reason why more adolescents also dropped out between ages 15 to19 may also be attributed to the fact that society considers them adults so they make unhealthy decisions on their own without guidance.

This current data shows that most adolescents dropped out of school at the primary level. Dropping out of school at those lower levels has a lot of implications including lack of exposure to reproductive health matters. For instance previous research conducted by the Uganda Bureau of Statistics and ORC Macro, (2001) found that out of school adolescents aged between 15 to 19 who either had no knowledge of STIs or were unable to recognize any symptoms of STIs in a man were more than 60%. The working status of the respondents who took part in the survey revealed that 35.7% of the adolescent school dropouts were working for pay and a majority of 64.3% was unemployed. The fact that majority of the adolescents were unemployed was supported by the findings made by Kronick and Hargis (1998) who indicated that dropping out of school resulted in high rate of unemployment which led to higher crime and delinquency rates. This is mostly because these adolescent do not have certificates to qualify them for gainful employment leaving them no choice than to engage in activities like load carrying ("Kayayo").

5.2 Reproductive health history of adolescent school dropouts

In this study, a higher percentage of the respondents (57.4%) reported to have had sexual experiences. Comparing this with previous reports on out of school adolescents, the rate indulging in sexual activity fell within the range (30%-60%) as reported by Anastasia (1998) & Abate (1999) comprising Ethiopian adolescent school dropouts. . This percentage (57.4%) is still high and indicates the need for more education for out-of-school adolescents with respect to sexual and reproductive health. Modern contraceptive use was found to be low among the sexually active study subjects confirming an earlier study conducted by Alemayehu et al. (2006) who also found less use of modern contraceptives by adolescent school dropout.

This finding could be due to the barriers of accessing reproductive health needs as reported by the respondents in the current study. For example lack of information on the issue was reported to be a major barrier. In addition, the respondents also indicated time constraints probably because they are preoccupied with trying to meet their daily needs like food and clothing. Another reason could be due to the difficulty adolescents have talking to their parents as revealed by this study.

According to the current study, less than 50% of the respondents have used condom during sex which supports a study in three districts in Ghana where 41% of respondents aged 10–19 who had ever had sex used condoms (Sallar, 2001). It, however, contradicts the study done by Afenyadu and Goparaju (2003) who found out that more than 50% of sexually active adolescents in Dodowa used condom during sex. The less use of modern contraceptives can result in unintended pregnancies with its consequences such as abortion and miscarriage (FHI, 1997). The less use of modern contraceptives could partly account for the high rate of pregnancy among the respondents in the current study. The study also indicated that majority of adolescents who became pregnant (55.6%) induced abortion by themselves instead of visiting qualified personnel for assistance which contradicts the report in the GSS (2009), indicating 57% of women sought a doctor to perform an abortion with only 19% turning to a friend or relative or inducing the abortion themselves.

A result for the outcome of the last pregnancy as indicated by the study was that 66.7% of adolescent school dropouts gave birth. This predisposed them to the development of complications leading to an increase in infant and maternal morbidity and mortality rates.

According to Awusabo-Asare et al. (2004), early child birth might be as a result of less education attained by adolescents especially the females aged 15 to 19.

Most adolescents especially the girls are more likely to suffer from matters in relation to their sexual and physical health due to the poor information they receive on reproductive health issues (Sedrivi, 2011) which can results in unplanned pregnancies.

5.3 Reproductive health needs of adolescent school dropouts

Majority (96.4%) of the respondents indicated they needed information on HIV and AIDS supporting previous studies such as Alemayehu et al. (2006) who also found majority of adolescent school dropouts were aware and needed information on HIV and AIDS. The respondents might need information on this issue because of the consequences associated with contracting the infection. In Ghana, it is common to find people with HIV and AIDS being stigmatized, excluded from family or social activities or even lose their job. These developments can put a lot of psychological and emotional strain on the affected individual. To help do away with these negative experiences, people will be ready to know more about the condition. It is therefore not surprising that the respondents in the study indicated they needed more information on HIV and AIDS.

When adolescent school dropouts are given information on STIs, it will go a long way to enable them recognize any form of symptoms of STI in themselves and their sexual partners (UBOS and ORC Macro, 2001) and help reduce STIs among adolescent school dropouts. When adolescent school dropouts receive more information on the above mentioned health services, it

will result in the reduction of unwanted pregnancies (Abubeker, 2004) and increase in the utilization of quality sexual and reproductive health services among adolescent school dropouts (Neil, Kristan & Mangi, 2003).About 78% of the adolescent school dropouts indicated they need information on sexual abuse/ violence and 77.5% reported that they needed to be abreast with issues on how to prevent early pregnancies. The need for information was in support with Dehne & Riedner (2005) who stated that more information needed to be given on the prevention of HIV, AIDS and STIs.

The study showed that about 28% of adolescents had accessed contraceptives from health facility. The finding does not compare favorably with those of Alemayehu et al. (2006) who observed that about 55% of adolescent school dropouts who took part in their survey had visited health facilities for reproductive health services. The reason could be that the adolescents from the previous study might have had more information as to where to get these services. Adolescent school dropouts, however, might not be seeking reproductive health services from the various health facilities due to feelings of discomfort, belief that the services are not intended for them, fear of being seen by parents and others, embarrassment at needing the contraceptive services and expensiveness of services (Berhane, 2000).

The most patronized facility for reproductive health services by the adolescents was the drug store/pharmacy. This trend support previous studies which also reported that adolescent school dropouts utilized drug store/pharmacy shop. For example, Singh et al (1999) found respondents in the study to patronize drug store/pharmacy shop. This could be due to the possibility of

meeting only one person compared to the hospitals/clinics where there are so many people and the fact that the little money one has can conveniently be used at the drug store/pharmacy instead of wasting much more at the hospitals/clinics. Most adolescent school dropouts (71.8%) were not visiting health facilities for their reproductive health needs. This was mostly due to lack of information on reproductive health services received by the adolescents. According to the GDHS 2008 report, only a few women (18%) aged 15 to 19 years began using contraceptives in order to prevent unintended pregnancies (GSS et al., 2009).

From the Chi square analysis it was also evident that adolescent school dropouts aged 15-19 years significantly reported they have heard of contraception, STIs and sex education compared to those aged 10-14 years. This observation could be explained by the almost axiomatic conception of a direct proportionality between age and reproductive health matters. Though no significant difference was observed for the primary, JHS and SHS school dropout on whether they have heard of contraception and STIs, primary adolescent school dropout reported they have heard of sex education compared to those who dropped out at the JHS and the SHS. This difference could be attributed to the large number of participants who dropped out at the primary level.

5.4 Adolescent school dropouts' current and perceived source of information on reproductive health needs

In this study, adolescent school dropouts stated obtaining information on reproductive health from various sources. Most of them (38.4%) talked to their friends/peers though majority of the respondents (42%) indicated it was the duty of the health worker to provide information on

reproductive health issues. Those who sought information from health workers were very few (6.6%). According to Rosen (1996) and Strasburger (1997) the association of adolescence with health risks mandates health professionals to understand the physical, cognitive and psychosocial components of adolescents' growth and development which will serve as a comprehensive history taking, physical examination and guidance/counseling to improve the health and welfare of adolescents.

The adolescents' inability to talk to the health worker for the correct information may be as a result of the judgmental attitude of these workers. Most of them are likely to see these adolescents as bad boys/girls and this is likely to make them feel unaccepted. Another possibility could be that, these adolescents may feel shy going to the reproductive health facilities since they might be seen and ridiculed. If health workers accept these adolescents and give them information on their reproductive health needs as indicated in this current study, they will feel more comfortable accessing information and this will reduce their risk of making harmful decision as a result of inadequate information received from friends. Further research will be necessary to determine what prevents adolescents from seeking information on reproductive issues from health workers when they think they ought to be the ones to be providing them.

Another important person adolescents were not receiving information from as expected by them were mothers. This could be attributed to the fact that mothers are not having enough time for their children as should be the case because they have to leave them in the care of care takers to undertake other responsibilities. This further predisposes these adolescents to peer influence.

5.5 Awareness on reproductive health issues by adolescent school dropouts

From the study, it was evident that most respondents had heard much on reproductive health issues especially HIV and AIDS, STIs, the use of contraception, sexual abuse and sex education. Kotwal, Gupta & Gupta (2008) in their study show that adolescent school dropouts' receipt of information on reproductive health issues was inadequate. In their study, adolescents school dropout scored low on information concerning clinical symptoms and biological symptoms of AIDS and the relationship between AIDS,HIV and STD's, female reproductive organs, conceivable age and reproductive age of men, unsafe abortion, legal and illegal abortion and its harmful effects. In the current study, it was also evident that adolescent school dropouts reported having received low information on post abortion care, antenatal, intra and postnatal care and delivery services.

This supports some studies indicating that adolescents' sexual and reproductive health needs in many parts of the world are poorly understood or not fully appreciated (WHO, 2006; Bott et al., 2003). Agyei et al (1992), however, stated that in spite of the high level of awareness of contraception, its use is relatively low since about 63% of respondents who have ever had sex used a form of contraception which is supported with the finding in the study that 63.3% of respondents who have ever had sex used a form of contraception.

The reason might be that in spite of adolescents being aware of these reproductive health issues the knowledge on them could be inadequate so they still engage in risky behaviours. This explains why they are continuously exposed to some health risks for instance engaging in unprotected sex. Adolescents need more information on attaining higher education in other to

reduce HIV and AIDS and other STIs and unintended pregnancies which will result in school dropouts (Brewer et al., 2007).

5.6 Reproductive health services available to adolescent school dropouts

As indicated in the 2010 annual report of the Ga East municipality there was no adolescent friendly corner and this was still true at the time of the study as confirmed by the heads of the various reproductive and child health units. Pathfinder International (2008) indicated that pregnancy testing and provision of antenatal, delivery and postpartum care, with special attention to the needs of younger girls and those pregnant for the first time; pre- and post-abortion counseling and provision of or referrals for safe abortion should be made available to adolescents. The above constitutes some of the services made available to the adolescents in the sub municipalities. With these services in place in a friendly and more private environment, adolescents are likely to be more comfortable to access the needed services.

WHO (2003) stated that "The utilization of services by adolescents can be greatly increased by training health workers to be nonjudgmental and empathetic, making health facilities user-friendly and obtaining the support of community leaders for the provision of health services to adolescents". Adequate training will enable health workers appreciate these adolescents for what they are and acknowledge their needs. In view of this all barriers stated by both heads of the reproductive and child health unit and adolescents as affecting the access to RHNs including lack of privacy, shyness, fear of being called a bad boy or girl and lack of information from parents should be properly addressed.

CHAPTER SIX

6.0 CONCLUSIONS AND RECOMMENDATIONS

6.1 Conclusions

- This data show that adolescents have limited access to information on reproductive health in the municipality.
- There was a high incidence of teenage pregnancy in the study area.
- Majority of adolescents who became pregnant induced abortion by themselves instead of visiting qualified personnel for assistance.
- Although adolescents could determine their reproductive health needs, accessing them is rather low for instance on delivery services.
- This study also found out that there were no adolescent friendly corners in the municipality and there is no privacy for the few who visit the reproductive health facilities.

6.2 Recommendations

6.2.1 Government

- Both governmental and non-governmental organizations should make adolescents friendly corners available so that they can seek adequate information and services on their reproductive health prevent the complications that come with engaging in risky behaviours like unprotected sex and self induction to terminate pregnancy. This in effect means government should make it a policy that adolescent friendly corners are created within communities.

- Administrators in the various health facilities may allocate some days of the week for provision of adolescent health services only.

6.2.2 NGO

- Given that the adolescents have problems accessing their reproductive health needs, there is the need to educate them on how these needs can be met. NGOs can take up the challenge of taking these information to them through platforms created in churches, markets and social groups.
- NGOs and the government should intensify education of owners of drug stores/pharmacy shops on adolescent RHNs for those who go there since most adolescents patronized these facilities for their reproductive health services.
- NGOs and the government should consider education and involving some of these adolescent school dropouts as ambassadors to champion the education of their peers on RHN and where to assess them.

6.2.3 Research

- Further research is needed to clarify what actually prevents adolescents from seeking information on their reproductive health needs from the health worker instead of their friends/peers as indicated in the study.

REFERENCES

Abate, S. (1999). *Determinants of high-risk sexual behavior for HIV/AIDS among out of school youth in Addis Ababa, Ethiopia. (Unpublished Dissertation)* Department of Community Health, Faculty of Medicine, Addis Ababa University.

Abubeker, A. (2004). *Youth reproductive health problem and service preference,* West Harereghe, Assebe Teferi. (Thesis) Department of Community Health, Faculty of Medicine, Addis Ababa University.

Afenyadu, D. & Goparaju, L. (2003). *Adolescent Sexual and Reproductive Health Behaviour*. Dodowa, Ghana. Pp 27.

Agyei, W., K., A. & Epema, E., J. (1992). *Sexual behavior and contraceptive use among 15-24-year-olds in Uganda,* International Family Planning Perspectives, 18(1): 13-17.

Alemayehu, S., Mesganaw, F. & Worku, A. (2006). *Reproductive health needs of out-of-school adolescents*: A cross-sectional comparative study of rural and urban areas in northwest Ethiopia. Ethiopia. J. Health Dev: 20(1)

Anastasia, J. G. (1998). *Sexual activity and Contraceptive use: The components of the decision making process.* Studies in Faming Planning;29(2):154-166.

Arnett, J. J. (2001). *Conceptions of the Transition to Adulthood: Perspectives from Adolescence through Midlife.* Journal of Adult Development, Vol. 8, No. 2.

Awusabo-Asare, K., Albert, M., A. & Kumi-Kyereme, A. (2004). *Adolescent Sexual and Reproductive Health in Ghana*: A Synthesis of Research Evidence. Occasional Report No. 13

AYA (2001). *Uganda Demographic and Health Survey 2000-2001*. Calverton, MD, USA: UBOS and ORC Macro.

Barkat, A., Ara, R., Akhter, S., Majid, M., Maksud, A., K., M., Matiur, R. & Paddar, A. (2002). *Baseline survey on adolescent reproductive health.* Human Development research centre, Dhaka.

Berhane, F. (2000). *Health problems and service preferences of school adolescents in Addis Ababa with emphasis on reproductive health (Dissertation).*Department of Community Health, Addis Ababa University.

Bott, S., Jejeebhoy, S., Shah, I. & Puri, C. (2003). *Towards adulthood: exploring the sexual and reproductive health of adolescents in South Asia*. Geneva, World Health Organization.

Boyd, A., Asheford, L., Haub, C. & Corenelius, D. (2000). *The world's youth*. Population Reference Bureau. City of PUBLICATION, Washington, D.C. PP 27.

Brewer, G., Brown, M. B. & Migdal, M. J. (2007). The importance of appropriate sexuality education. A position paper from the center for inquiry office of public policy.

Chassin, M. (1997). *Assessing strategies for quality improvement,* Health Affairs, 16: 151–161.

Dehne, K. L. & Riedner, G. (2005). *Sexually transmitted infections among adolescents. The need for adequate health services*. WHO Library Cataloguing-in-Publication Data. ISBN 92 4 156288 9.

Family Health International [FHI] (1997). *Adolescent Reproductive health,* network, spring, Vol 17, No. 3

Fredricks, J. A., Blumenfeld, P. C., & Paris, A. H. (2004). *School engagement: Potential of the concept, state of the evidence*. Review of Educational Research, 74, 59-109.

Gebhart, L. & Coy, M. (2007). *Adolescent Health Needs Assessment*. Columbia/Boone County Department of Public Health and Human Services.

Ghana Demographic and Health Survey (2003). Ghana Statistical Service, Accra. Noguchi Memorial Institute for Medical Research, Legon, Ghana.

Ghana Demographic and Health Survey (2008). Preliminary report. Ghana Statistical Service. Ghana Health Service, Accra, Ghana. Pp 41.

Ghana Statistical Service (GSS), Ghana Health Service (GHS), and ICF Macro (2009). *Ghana Demographic and Health Survey 2008*. Accra, Ghana: GSS, GHS, and ICF Macro. pp 363

Ghana Statistical Service (2011). *Population and Housing Census for 2010, Provisional Results.*

Kotwal, N., Gupta, N., Gupta., R. (2008). *Awareness of Reproductive Health Among Adolescent Rural Girls (A Comparative Study of School Going Girls and Dropout Girls of Jammu).*Post Graduate Department of Community Resource Management and Extension, G.C.W. Prade, Jammu, Jammu and Kashmir.

Kronick, R. F.& Hargis, C. H. (1998). *Dropouts: Who drops out and why – And the recommended action (2nd ed.).* Springfield, IL: Charles C. Thomas.

MacKay, A., P. & Duran, C. (2007). *Adolescent health in the United States.* National Center for Health Statistics.

Muula, A. S. (2008). *Trends in Contraceptive Knowledge and Use Among Adolescent Married Women in Malawi.* Croatian Medical Journal, 49(4): 561–563.

National Survey of Family Growth [NSFG], CYCLE VI (2002). *Sexual and Reproductive Health of Persons Aged 10-24 years.* United States Department of Health and Human Services. National Center for Health Statistics. Inter-university Consortium for Political and Social Research.doi:10.3886/ICPSR04157.v1

Neil, P., Kristan, H. & Mangi, E. (2003). Addressing the reproductive health needs and rights of young people since ICPD: the contribution of UNFPA and IPPF. Tanzania country evaluation report. Pp 97.

Newmann, F. Wehlage, G. & Lamborn, S. (1992). *The Significance and Sources of Student Engagement* in F. Newman (Ed.), Student Engagement and Achievement in American Secondary Schools (pp. 11-39). New York, NY: Teacher's College Press.

Okotah, N. B. A., Laar A. K. (2012). *Sexual and Reproductive Health Knowledge and Concerns; A survey of adolescent students in Ga-East Municipality.* In press. IRCAB Journal of Natural and Applied Sciences; Volume 2, No.1, of June 2012.

Pathfinder International (1999). *Adolescent reproductive health in African path into the next century.* African Regional office.

Pathfinder International (2008). *HIV prevention among vulnerable populations*: *The Pathfinder International approach*. Technical guidance series number 6.

Population information program [PIP] (1995). *Population report USA*, series M, Number 9.

Reproductive Health Outlook [RHO] (2000). *Adolescent Reproductive Health Program* Examples. http://www.rho.org./html/adol_progexamples.htm

Ringheim, K. & Gribble, J. (2010). *Improving the Reproductive Health of Sub-Saharan Africa's Youth: A Route to Achieve the Millennium Development Goals* Washington, DC: Population Reference Bureau.

Rondini, S. & Krugu, J. K. (2009). *Knowledge, Attitude and Practices Study on Reproductive Health Among Secondary School Students in Bolgatanga*, Upper East Region, Ghana African Journal of Reproductive Health Vol 13 No 4.

Rosen, D. (1996). *Expectations of entering pediatric residents toward the care of adolescents*. Journal of Adolescent Health, 18:118.

Rumberger, R. (2004). "*Why Students Drop out of School*." In G. Orfield (Ed.) Dropouts in America: Confronting the Graduation Rate Crisis. Cambridge, MA: Harvard Press.

Sallar, A. M. (2001). *Sexual risk taking in the era of HIV/AIDS:* case study of adolescents resident in Ketu South, Upper Denkyira, and Offinso electoral constituencies in Ghana, dissertation, University of British Columbia, Vancouver.

Senderowitz, J. (2000). *Approaches to Adolescent Reproductive Health. Poptech Assignment* US: Agency for International Development: 176.

Singh, S., Darroch, J. E., Vlassoff, M. & Nadeau, J. (2009). *Adding it up: The Benefits of Investing in Sexual and Reproductive Health Care.* The Alan Guttmacher Institute. New York &Washington. ISBN: 0-939253-62-3.

Sridevi, K.V. (2011). Awareness towards adolescent Reproductive Health among teacher trainees of Awassa, South Ethiopia. International online multidisciplinary journal.

Strasburger, V. (1997). *Adolescent medicine in the 1990s: No more excuses*. Clinical Pediatrics, 36:87.

Temin, M. & Levine, R. (2009). *Start with a girl: a new agenda for global health.* Washington DC, Center for Global Development (http://www.cgdev.org/content/publications/detail/ 1422899).

The 2010 Annual Report of the Ga East Municipal Health Directorate (2010). Pp43.

Timar, T., Biag, M. & Lawson, M. (2007). *Does State Policy Help or Hurt the Dropout Problem in California?* California Dropout Research Project Report #3. Center for Applied Research in Education: University of California, Davis.

Tweedie, I. & Witte, K. (2000). *Ghana Youth Reproductive Health Survey Report*, Accra, Ghana: Ghana Social Marketing Foundation.

Uganda Demographic and Health Survey (2001). Uganda Bureau of Statistics (UBOS) and ORC Macro. Calverton, MD, USA: UBOS and ORC Macro.

UNICEF, UNAIDS, WHO (2002). Young people and HIV/AIDS opportunity in crisis. United Nations Children's Fund, Joint United Nations Programme on HIV/AIDS and World Health Organization, 2002. Geneva, Switzerland.

UNICEF (1997). Youth health for a challenge, note book on programming for young people's health and development. New York.

UNESC (2001). *Situation of the sexual and Reproductive Health of young people in the Asian and Pacific region*, Item 5, Bangkok.

WHO (1999). *Programming for adolescent health and development*. Report of WHO/UNFPA/UNICEF study group on health programming for adolescents. Technical Report Series No. 886.WHO, Geneva.

WHO (2003). *Adolescent friendly health services: an agenda for change.* Geneva.

WHO (2006). *Promoting and safeguarding the sexual and reproductive health of adolescents.* Policy Brief 4: Implementing The Global Reproductive Health Strategy

WHO (2011). The sexual and reproductive health of younger adolescents. Research issues in developing countries. Geneva, Switzerland. ISBN 978 92 4 1501552.

APPENDICES

Appendix 1

IINFORMED CONSENT FORM

TOPIC: REPRODUCTIVE HEALTH NEEDS OF ADOLESCENT SCHOOL DROPOUT

Institutional affiliation:

College of Health Sciences, School of Public Health, University of Ghana, Legon

Background:

Greet! My name is Evelyn Ayerko Appiah, a student of School of Public Health offering a masters programme. I am conducting this research which forms part of the requirement for the award of a degree in Masters of Public Health on the reproductive health needs of adolescent school dropout to be able to assist them assess these needs to the fullest.

Procedure:

Questionnaire will be administered to respondents who will be required to provide the necessary information.

Risks and Benefits:

Some sensitive questions will be asked by but giving sincere answers will help know what your needs truly are and identify whether there are facilities to take care of them participation is on voluntary basis and anyone can withdraw at anytime without any consequences.

Right to Refuse:

Taking part in the research is solely on voluntary basis and refusing to take part or withdraw in the course of the study will not result in any penalty.

Anonymity and Confidentiality:

Respondents will not be required to write his/her name. Answers given will be treated confidentially and used solely for academic purposes.

Before taking consent:

Is there any clarification or question you need to be addressed? If yes, write it in the space provided.

…….

…….

In case of any clarification on any issue please contact Evelyn AyerkoAppiah on 0261506677.

Consent (Participant)

I ……., having understood the consent form which was thoroughly explained to me in the English/Twi/Ga language agree to participate in the study.

Signature/Thumbprint of Respondent …… Date …….

Interviewers' statement

I the undersigned have explained the procedure of the study, risks and benefits to the subject in the language he/she understands. He/she has consented to be part of the study.

Signature of Interviewer ……..... Date …….

Proxy Consent Form

I ……., having understood the consent form which was thoroughly explained to me in the English/Twi/Ga language agree to allow my ward to participate in the study.

Signature/Thumbprint of Parent/Guardian …… Date ……

Interviewers' statement

I the undersigned have explained the procedure of the study, risks and benefits to the parent/guardian of the subject in the language he/she understands. He/she has consented to allow the subject to be part of the study.

Signature of Interviewer ……..... Date ……

Appendix 2

ETHICAL CLEARANCE

GHANA HEALTH SERVICE ETHICAL REVIEW COMMITTEE

In case of reply the number and date of this Letter should be quoted.

My Ref. :GHS-ERC: 3
Your Ref. No.

Research & Development Division
Ghana Health Service
P. O. Box MB 190
Accra
Tel: +233-302-681109
Fax + 233-302-685424
Email: Hannah.Frimpong@ghsmail.org

21 June, 2012

EVELYN AYERKO APPIAH, Principal Investigator
School of Public Health
College of Health Science
University of Ghana

ETHICAL CLEARANCE - ID NO: GHS-ERC: 28/03/12

The Ghana Health Service Ethics Review Committee has reviewed and given approval for the implementation of your Study Protocol titled:

"Reproductive Health Needs of Adolescent School Dropouts in the Ga East Municipality"

This approval requires that you submit periodic review of the protocol to the Committee and a final full review to the Ethical Review Committee (ERC) on completion of the study. The ERC may observe or cause to be observed procedures and records of the study during and after implementation.

Please note that any modification of the project must be submitted to the ERC for review and approval before its implementation.

You are also required to report all serious adverse events related to this study to the ERC within seven days verbally and fourteen days in writing.

You are requested to submit a final report on the study to assure the ERC that the project was implemented as per approved protocol. You are also to inform the ERC and your mother organization before any publication of the research findings.

Please always quote the protocol identification number in all future correspondence in relation to this protocol

SIGNED.....

PROFESSOR FRED BINKA
(GHS-ERC CHAIRMAN)

Cc: The Director, Research & Development Division, Ghana Health Service, Accra

Appendix 3

QUESTIONNAIRE ON REPRODUCTIVE HEALTH NEEDS OF ADOLESCENT SCHOOL DROPOUTS

Name of interviewer: …….

Sub municipality ……

Community ……

A. Background and Socio-demographic data

1. How old are you? …… years

2. Sex: Male [ ] Female [ ]

3. Religion: Christian [ ] Moslem [ ] Traditional [ ] Other (Specify)……

4. Dropped out of school at: Primary [ ] Junior High School [ ] Senior High School [ ]

5. Living with: Parent [ ] Friend [ ] Relative [ ] Alone [ ] Other (Specify) …….

6. Are you currently in a relationship? Yes [ ] No [ ]

7. Are you currently working for pay? Yes [ ] No [ ]

B. Reproductive Health History

8. Have you ever had sex? Yes [ ] No [ ]

9. If yes, did you use any of the under listed modern contraceptives?

Contraceptive pills [ ]Condom [ ] Intrauterine device [ ] Jadelle [ ] Injectables [ ] None [ ]

10. Age at first sexual intercourse …… years

11. Number of current sexual partner(s). None [ ] One [ ] Two [ ] Three or more [ ]

12. Have you ever been pregnant? Yes [ ] No [ ]

12a. If yes, at what age? …… years

12b. If yes to question 12, what was the outcome of the last pregnancy?

Had an abortion [ ] Gave birth [ ] Miscarriage [ ]

12c. If you had an abortion, who did it for you?

Gynaecologist [ ] Quark person [ ] Self induced [ ]

13. Are you currently pregnant? Yes [ ] No [ ]

14. How many children do you have? None [ ] One [ ] Two [ ] Three or more [ ]

C. Reproductive Health Needs

15. What reproductive health issue(s) should adolescents receive information on? Tick as apply.

Contraception Yes [ ] No [ ] Nutrition Yes [ ] No [ ]

Sexual abuse/violence Yes [ ] No [ ] Post abortion care Yes [ ] No [ ]

Delivery services Yes [ ] No [ ] HIV/AIDS Yes [ ] No [ ]

Antenatal, intra and postnatal care Yes [ ] No [ ]

Preventing early marriage Yes [ ] No [ ]

Sexually Transmitted Infections Yes [ ] No [ ]

16. Have you ever visited a health facility for contraceptives? Yes [ ] No [ ]

17. If yes, which of the under listed facilities have you sought services from in last 3 months? Tick as apply.

Government hospital/clinic [ ] Private hospital/clinic [ ] NGO facility [ ]

Drug stores/ Pharmacy [ ] Traditional healer [ ] Adolescent friendly corner [ ]

18. How long does it take to buy a form of contraception?

……

19. How were you received? Friendly [ ] Unfriendly [ ]

20. Was your need met by the facility? Yes [ ] No [ ]

21. What is the greatest fear of your life during the adolescent period? Tick one

HIV/AIDS and STIs [ ] Pregnancy [ ] Menstruation [ ]

Drugs [ ] Peer influence [ ] Other (Specify) ……

22. What are your greatest barriers in assessing reproductive health services? Please tick one.

Time constraints [ ]

Lack of information on the issue [ ]

Lack of interest or poor health literacy from parent [ ]

Lack of comprehensive family life education in schools [ ]

Inability to talk to parents about reproductive health issues [ ]

23. Who do you talk to about your reproductive health needs? Tick one

Father [ ] Mother [ ] Teacher [ ] Siblings [ ] Health worker [ ] Church member [ ] Friends/Peers [ ] None [ ] Other (Specify) ……

24. Who do you think should provide information on reproductive health issues? Tick one

Father [ ] Mother [ ] Teacher [ ] Siblings [ ] Health worker [ ]

Church member [ ] Friends/Peers [ ] None [ ] Other (Specify) ……

D. Awareness of Reproductive Health

25. What reproductive health issue(s) have you heard of? Tick as apply

Contraception	Yes [ ]	No [ ]	Nutrition	Yes [ ]	No [ ]
Sexual abuse/violence	Yes [ ]	No [ ]	Post abortion care	Yes [ ]	No [ ]
Delivery services	Yes [ ]	No [ ]	HIV/AIDS	Yes [ ]	No [ ]

Antenatal, intra and postnatal care Yes [ ] No [ ]

Preventing early marriage Yes [ ] No [ ]

Sexually Transmitted Infections Yes [ ] No [ ]

26. Have you ever heard of sex education? Yes [ ] No [ ]

27. If yes, how did you first hear about sex education?

Peer [ ] Parent [ ] Teacher [ ] Media [ ] Worship center [ ] Other (Specify)……...

28. Do you know about menstruation? Yes [ ] No [ ]

29. Have you experience this before? Yes [ ] No [ ]

30. At what age was menstruation experienced? ……..

31. How was the experience like? …….

32. How can pregnancy be prevented? Tick as apply

Abstinence [ ] Use of condom [ ] Education/Counselling [ ]

Avoid kissing [ ] Oral contraceptives [ ] Other (specify) ……

33. Do you listen to the radio? Yes [ ] No [ ]

34. Do you watch television? Yes [ ] No [ ]

35. What radio/television programme(s) do you listen to? Number 3 of the under listed with 1 being the most preferred.

News [ ] Talk shows [ ] Sports [ ] Music/songs [ ] Advertisement [ ]

Movies/Drama [ ] Health /Family planning related [ ]

36. In the last 6 months have you ever heard on radio/ television something about?

Menstruation Yes [ ] No [ ] Postponing early marriage Yes [ ] No [ ]

Wet dreams Yes [ ] No [ ] Sexual harassment Yes [ ] No [ ]

Physical changes during puberty Yes [ ] No [ ]

How pregnancy occurs Yes [ ] No [ ]

Contraception/ family planning methods Yes [ ] No [ ]

How to prevent other sexually transmitted diseases Yes [ ] No [ ]

Where to get reproductive health services Yes [ ] No [ ]

37. What do you think about discussing sexual issues? Please tick one.

It is important [ ]

It is not important [ ]

I feel comfortable with such discussions [ ]

1 do not feel comfortable with such discussions [ ]

I would like to talk more about it [ ]