



**Understanding the secondary school girl's susceptibility to HIV in
Takoradi, Ghana: case study of Takoradi Senior High School (TSHS)**

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in Partial Fulfillment of the Requirements for the Degree of Master of
Development, Specialization Rural Development and HIV/AIDS

By

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Above all, I glorify the almighty God whose kindness, grace, courage and mercy saw me throughout my life.

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The road to my current success has been up and down, long and winding in short it was difficult.

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Dedication

I would like to dedicate this piece of work to my sweet, my soul and my best half 'Anita'-the one I love and I will love forever. To the one who is special to me; of course, her name Anita. She has been my inspiration and support through thick and thin.

Anita, I just want to say thank you and may God richly bless you.

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Acronyms

AIDS	Acquired Immune Deficiency Syndrome
HIV	Human Immunodeficiency Virus
VCT	Voluntary Counselling and Testing
FGD	Focus Group Discussion
TSHS	Takoradi Senior High School
PLWHA	People Living With HIV/AIDS
JHS	Junior High School
SHS	Senior High School
STDs	Sexually Transmitted Diseases
GNA	Ghana News Agency
STMA	Sekondi-Takoradi Metropolitan Assembly
NDC	National Democratic Congress
MOESS	Ministry of Education Science and Sports
GSTS	Ghana Senior Technical School
WASSCE	West African Senior Secondary Certificate Examination
APGSHS	Archbishop Porters Girls Senior High School
BECE	Basic Education Certificate Examination
UNESCO	United Nations Education Science and Culture Organization
MTCT	Mother To Child Transmission
MSM	Men having Sex with Men
IDUs	Intravenous Drug Users
NACP	National AIDS Commission Programme
FSWs	Female Sex Workers
MARPS	Most At Risk Groups
UNAIDS	The Joint United Nations Programme on HIV and AIDS
UNGASS	United Nations General Assembly Special Session on HIV/AIDS
UNGEI	United Nations Girls' Education Initiative
STIs	Sexually Transmitted Infections

Abstract

This research study aims to understand the factors that influence the female secondary school students' susceptibility to HIV at TSHS in order to contribute to the reduction of the epidemic. The study was conducted with 76 respondents, 75 female students and 1 assistant headmistress using 3 methods of data collection. 45 students responded to anonymous questionnaire, 30 students participated in focus group discussion (FGD) and 1 assistant headmistress was interviewed.

The results show that the students' ages range from 15 to 21 years from 3 community areas (Rich, Middle and Poor). Majority (77%) of them come from communities and with the least (9%) coming from the poor communities. Fathers are the major providers of the basic needs of the students in all the communities except in the poor communities where mothers are the main providers of students' basic needs.

19 students (48%) out of 44 respondents have experienced sexual harassment and violence with 63% from the rich, 21% from the middle and 16% from the poor communities. 12 students out of 19 sexually harassed and violated, were committed by a relative. Through peer pressure influence 8 students (18%) had sexual partners and engage in sex. 23% respondents from the questionnaire survey will have sex for money if the sum is high.

Majority of the students had adequate knowledge on HIV/AIDS but some lack the ability to use this knowledge when they find themselves in risky situations. 9 pregnancy cases were recorded in TSHS in the 2010/2011 academic year. Teacher-student sexual relationship is a problem at TSHS. 11 students rejected love proposals from teachers. The National Service Personnel are the main culprits of the practice.

The influx of oil workers and foreigners has brought money into the economy of Sekondi-Takoradi but has also increased cost of living. This has impacted negatively on the money parents give to students making it difficult for them to have a spending power. It has created a risky situation for the students to find alternative means to supplement their wants thereby becoming susceptible to HIV.

To achieve the objective of this study, the researcher recommends HIV/AIDS be introduced into school curriculum. It should also be included in the orientation lessons for the first year students. TSHS should collaborate with Kwesimintim Health Centre to help in training staff and students on HIV/AIDS and also provide VCT.

Chapter 1

1.1 Introduction

This research study is in partial fulfilment of the requirement for the professional master degree in Rural Development and HIV/AIDS at the Van Hall Larenstein University of Applied Sciences in Wageningen. The study aims at understanding the factors that contribute to the female secondary school students' susceptibility to HIV at the Takoradi Senior High School (TSHS). Understanding these contributing factors of TSHS female students' susceptibility to HIV will provide the appropriate tools for the Sekondi-Takoradi (S-T) Metro Education Service and the management of TSHS to draw up interventions to help increase secondary school students' resistance to HIV infection in S-T.

1.2 Background Study

This study is important due to high cost of living as a result of inflow of oil money into Sekondi-Takoradi, the third highest HIV prevalence region in Ghana. Such situations create environments for people to adopt various livelihood strategies, some risky (actions that can easily lead to HIV infection) including engaging in sexual networks for money to cope the hardships (Wamoyi et al., 2010a). Furthermore, the reputation that some senior secondary school female students have of engaging in sexual activities worsens the situation. This chapter gives overview of HIV/AIDS in the Western Region and highlights the high unequal income distribution and high cost of living in Sekondi-Takoradi which create a risky situation for the female secondary school student. It further talks about secondary schools in S-T and enrolment of students.

Furthermore, gender inequality in Ghana which disadvantages females and disempowers them educationally and economically is also looked at in this chapter. Migration and mobility of people to Sekondi-Takoradi as a result of the rapid economic growth are illustrated. Contextualization of the research problem, the research owners, the objective of the study and the research questions is also highlighted in this chapter. Finally, the working definitions and the conceptual framework of the study are described in this chapter.

1.2.1 HIV/AIDS in the Western Region

The HIV prevalence in the Western Region has been reducing steadily since 2006 until 2009. It reduced from 4.3% in 2006 to 2.9% in 2008 before increasing to 3.1% in 2009 (GAC, 2010). In 2009, 62,000 people were estimated to be living with HIV/AIDS in the Western Region. The HIV prevalence in Sekondi-Takoradi increased from 3% in 2008 to 4% in 2009 with 6.6% of the people living with HIV/AIDS (PLWHA) being women between the ages of 25 to 27 years while 4% were men (STMA, 2010). Nonuse of condom during sex and cultural practices like widowhood rights were the causes to the spread of HIV.

A recent report shows that homosexuality has taken root in the Western and Central Regions which share borders. The report indicated that the number of registered lesbians and gays in these regions increased from 2900 in 2008 to 8000 in 2010 (Modern Ghana, 2011). Majority of these homosexuals tested positive for many STDs including HIV/AIDS after undergoing Voluntary Counselling and Testing (VCT). This number included students in the Junior and Senior High Schools (JHS/SHS), polytechnics and workers. According to the report almost all the registered homosexuals were also bi-sexual with some having wives and girlfriends. This phenomenon was a factor in the increase in the HIV infections in the Western Region.

Alcohol abuse (especially “apketeshie”, a cheap local brewed gin) among both males and females including young people is also a contributing factor to the increase of HIV infections in the Western Region (STMA, 2010). Increased alcohol consumption makes women to be easy targets for men, leads to male violence and makes it difficult for women to resist or negotiate unprotected sex (Luginaah, 2007). Furthermore, the absence of behavioural change to reduce the incidence of HIV even though people are aware of the disease and the risks involved in unprotected sex contributes to the spread of HIV (Modern Ghana, 2010; STMA, 2010). The influx of commercial sex workers to Sekondi-Takoradi due to its rapid economic growth is an alarming situation which needs to be checked to prevent the increase in HIV infections.

1.2.2 Takoradi Senior High School

Takoradi Senior High School is one of the 14 senior high schools in Sekondi-Takoradi. It is a mixed sex public school with female student population of 939, comprising 334 students in SHS 1, 310 in SHS 2 and 295 in SHS 3. It runs the day system. According to a UNESCO Institute of Statistics report, the number of female students entering the senior high schools in Ghana has been reducing since 2006 to date. It reduced from 100% in 2006 to 98% in 2007 then to 92% in 2008. It is estimated to drop in 2009 and 2010 (The World Bank Group, 2011). The reduction was attributed to the reducing levels of families’ incomes despite the continuous growth of the gross national income from US\$590 in 2006 to US\$1,240 in 2010. This information can explain the reducing female student population from SHS1 to SHS2 at TSHS.

1.2.3 High unequal income distribution and poverty in Sekondi-Takoradi

About 350,000 residents live in Sekondi-Takoradi. The city is well known for its high cost of living and poverty (Plitzer Center, 2011). The inflow of oil money into the city has worsened the cost of living. It has displaced many people who can no longer afford the increasing cost of living while creating wealth among a substantial number of people in the twin city (CHF International, USAID and STMA, 2010). This phenomenon has widened the rich-poor gap in the twin city. From a research study carried out by STMA and CHF International on poverty mapping of Sekondi-Takoradi the median income per household of the entire city was \$4.91 per day. The highest income area was Beach Road with an average income of \$17.67 per day with Kojokrom being the poorest with \$3.66. Beach Road (\$17.67), Chapel Hill (\$17.00) and Anaji Estates (\$15.87) per day, are the non-poverty areas with 35 other communities representing 74% falling within the moderate poverty pockets (CHF International and STMA, 2010).

Poverty has driven many inhabitants to either the city’s outskirts or take risks to cope with the situation. Some females, including secondary school students aged between 15 to 19 years, engage in risky behaviours like unsafe sexual relations to cater for their basic needs which their poor parents cannot provide or attain some social status on campus (Wamoyi et al., 2010b; Leclerc-Madlala, 2003). The provision of 10 dollars a month to adolescents and their parents in Malawi significantly changed female adolescents’ sexual behaviour patterns; reduced HIV/AIDS transmission by 60% and genital herpes infections by 75% (World Bank, 2010). Also, Barnett and Whiteside (2006) and a research study by Wamoyi et al. (2010a) in Tanzania showed that female students engage in age-disparate and intergenerational transactional sexual relations to meet some basic needs and also to obtain some social status on campus.

1.2.4 Gender inequality in Ghana

In households in some African countries including Ghana where the culture values girls less than boys but as sources of wealth, parents over protect the girl's virginity for marriage and under-invest in their education depriving them of socialization (Urdang, 2007). These actions make girls to risk through curiosity with men when they get the opportunity thereby heightening their susceptibility to infection and interpersonal violence (Urdang, 2007).

These behavioural high-risk activities of these adolescent female students make them to be more susceptible to HIV because of their physiological properties of an immature genital tract and the power differentials between them and the older male partners (Quinn and Overbaugh, 2005). Large power differentials put these girls at high risk because they have less power to control sexual encounters with these men who often have multiple sexual partners and will not like to use condoms.

1.2.5 Migration and mobility in Sekondi-Takoradi

From 2006, the influx of truck drivers from neighbouring landlocked countries to the Takoradi port for business as a result of the Ivorian war crisis has increased transactional sexual relationships in the metropolis (GhananWeb, 2006). Girls between the ages of 13 and 16 years are involved and some do not use condoms resulting in unwanted pregnancies and increasing their risk of HIV infection.

Similarly, the commercial production of petroleum in the Western Region has brought in a lot of money and migrant workers into Sekondi-Takoradi. A report by Plitzer Center (2011) indicates the high rise in the cost of living and poverty has increased commercial sex and armed robbery. According to Barnett and Whiteside (2006) "Globalization increases susceptibility through destruction of local values and norms, replacing these by new constructions of desires". This is what exactly the influx of foreign oil companies and nationals as well as local oil workers have brought to Takoradi creating a risky environment for risky behaviours and livelihoods thereby increasing the secondary school girl's susceptibility to HIV.

1.2 Research problem

Differences in income, status and social standing influence livelihood choices and ultimately sexual networks (Barnett and Whiteside, 2006). The macro-economic financial stress that makes life tough, livelihoods more difficult and makes some people to ignore the risks associated with their sexual behaviours create risky environment for HIV infection. Every society has regulations about what sex is and how sexual activities should take place (Barnett and Parkhurst, 2005). Rapid changes such as economic growth or decline can alter these sexual mixing patterns to become disassortive. Social order and cohesion are very important in regulating patterns of sexual mixing in populations in a society.

The high inequality in income distribution, poverty, low social cohesion, high life style culture of inhabitants and high cost of living in Sekondi-Takoradi, all cumulate to create a complex risky environment for the female senior secondary school student. The inflow of oil money has worsened the cost of living. Students from poor homes and outside Sekondi-Takoradi staying in hostels are at greater risk of engaging in risky behaviours such as provision of sex for money to those who have the means to pay to be able to cope with the situation. Most of these transactional sexual relationships are age disparate exposing the students to sexual violence

and abuse, rape and HIV infection because of the high power relations associated with such relationships (Wamoyi et al., 2010a).

Furthermore, the inadequate knowledge of secondary school students in Sekondi-Takoradi on HIV/AIDS raises the school girl's susceptibility to HIV (GhanaWeb, 2010). The complexity of the situation in here is that, the student with inadequate knowledge on HIV/AIDS engages in sex with older men without power to negotiate for safer sex but needs money to cope with harsh economic situation. This puts the female student at greater risk of susceptibility to HIV. In view of this complexity facing the student in Sekondi-Takoradi, it is therefore important to understand these factors influencing the female student's susceptibility to HIV and come up with good interventions to help the situation. Knowing these factors will help to increase the resistance of the female student to HIV.

1.3.1 The problem owners

The Sekondi-Takoradi Metropolitan Assembly Education Service of Ghana Education Service (G.E.S.), and Takoradi Senior High School.

1.3 Study objective

To contribute to the reduction of the TSHS girl's susceptibility to HIV infection by assessing the factors which contribute to create risky environments for her as a result of the petroleum production in the Western Region by recommending for the inclusion of HIV/AIDS resistance building into the teaching curriculum.

1.4.1 Research Questions

1. What are the factors influencing the TSHS female student's susceptibility to HIV?
- 1.1. What are the socio-economic factors that influence the TSHS female students' susceptibility to HIV?
- 1.2. What are the factors in the school's learning environment that influence the TSHS female student's susceptibility to HIV?
- 1.3. What are the factors in the environment of Sekondi-Takoradi that influence the TSHS female student's susceptibility to HIV?

1.4.2 Working Definitions

For the purpose of this research study, Takoradi Senior High School girls are adolescent girls of ages between 15 and 20 years coming from communities with different economic backgrounds. They face different risky situations from their communities and may adopt different levels of risky behaviours and livelihoods to cope.

Students' susceptibility to HIV is the increased likelihood of the students been predisposed to the transmission of the virus and becoming infected as a result of certain set of factors determining the rate at which the epidemic is propagated (Barnett and Whiteside, 2006).

Risky environment in this study refers to physical, socio-cultural, economic and political environmental influence that facilitate the rapid transmission of HIV by compelling students to engage in risky behaviours and livelihoods that expose them to the virus (Barnett and Whiteside, 2006). The risk environment here focuses on student's decisions as well as the

influence of the norms, practices, cultural beliefs and economic conditions of the society of Sekondi-Takoradi.

Risky situation in the study represents situations which the female students find themselves in and that raise their susceptibility to HIV. Most of these situations are influenced by economic conditions of the students' families (Barnett and Whiteside, 2006).

Risky behaviours in the study depict behaviours that the female students engage in making them more likely to be infected with HIV (Barnett and Whiteside, 2006).

Risky livelihoods are the strategies which the students adopt to earn them some money or other material things to meet their needs. These strategies increase their susceptibility to HIV (Barnett and Whiteside, 2006).

1.4 Conceptual Framework

The conceptual framework presented below illustrates the link among the socio-economic factors at the home and society, learning environment at the school and the general environment of Sekondi-Takoradi that influence the TSHS girl's susceptibility to HIV.

Elements of the socio-economic factors such as poverty of parents, power relation, etc. contribute to the creation of a risky situation for the girl both at home and in the society. These risky situations may compel her to engage in risky behaviours to support the family and her financially. Again, if the school learning environmental factors make it difficult for students to understand lessons and pass their exams, then this can also create a risky situation for the girl to come up with ways of making good scores. Especially, if there are male teachers who may be willing to give marks in exchange for sexual favours can create these risky situations for the girls to enter into transactional sex for marks.

When the gap between the rich and poor is very wide, the "haves" have a lot of influence and power over the "don't haves". Due to their wealth and power they most often get what they want. In such situations, a female student from a poor home who have difficulty in getting her basic needs provided can easily fall prey to older men who have the money to give. Skewed income distribution in a society can therefore create a risky environment for the girl student to engage in a risky behaviour or livelihood to meet her basic needs. These factors can therefore contribute to increasing the female student's susceptibility to HIV.

Figure 1: Conceptual Framework of this study: TSHS female students' susceptibility to HIV

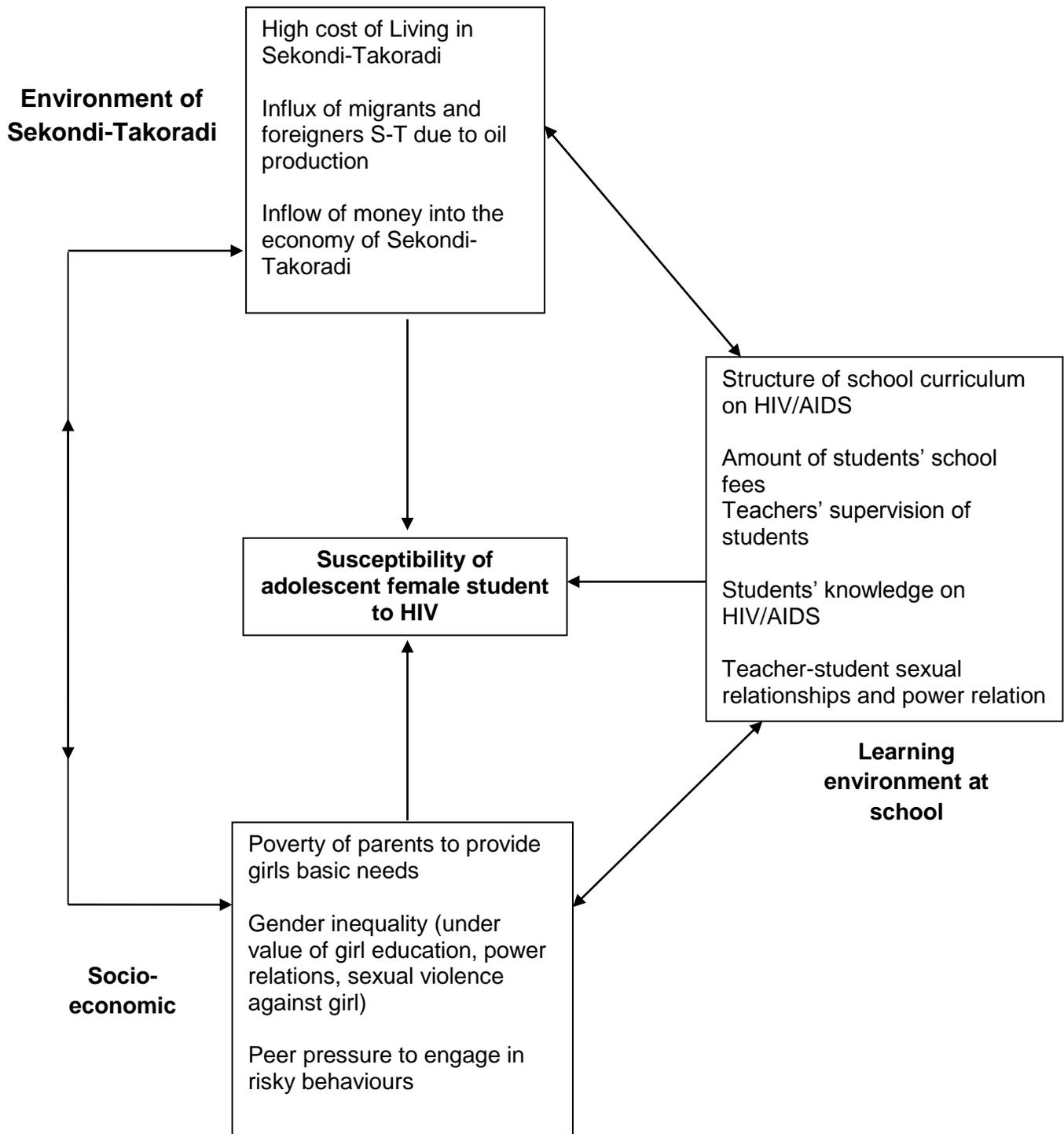


Figure 1: **Conceptual framework of this study: TSHS female students' susceptibility to HIV**

Chapter 2 Literature Review

2.1 Introduction

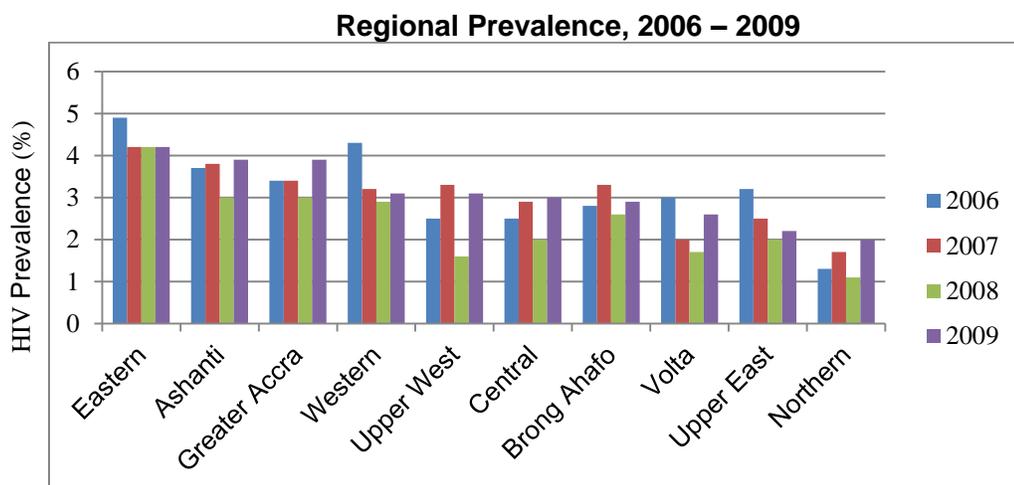
This chapter emphasizes on the general overview of the generalized HIV/AIDS situation in Ghana. Particular focus is made to explain the impacts of HIV/AIDS on education looking at the major stakeholders involved with much emphasis on the girl education. The girl education is given much focus because females are the most infected and affected group in the Ghanaian HIV/AIDS epidemic. The contribution of poverty which makes most females to engage in sexual relationships to raise their susceptible to HIV is highlighted in this chapter. Parental influence on female adolescents' sexual activities which makes them more susceptible to HIV is also given a look in this chapter of the study. Finally, the influence of petroleum production on HIV in the areas of production is given a look in this chapter. These topics have been looked at in this chapter because they create a complex environment for the female student to be more susceptible to HIV.

2.2 HIV/AIDS in Ghana

Although, West Africa's HIV prevalence is lower compared to Southern Africa, the sub region has countries with serious national epidemics. Ghana and its neighbour, Côte d'Ivoire have national prevalence of 1.9% and 3.9% respectively (UNAIDS, 2008). HIV prevalence has been stable in Ghana but fell from 3.2% to 2.5% from 2002 to 2006 among the ages of 15 to 24 years (Bosu et al., 2009). HIV is mainly transmitted through heterosexual intercourse while mother-to-child transmission (MTCT) is also increasing.

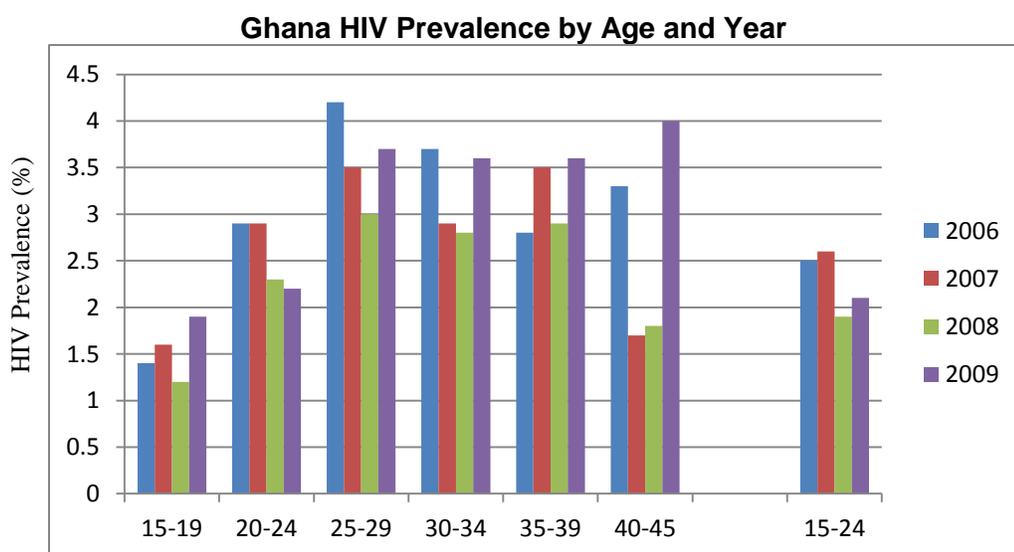
Currently, men who have sex with men (MSM) and injecting drug users (IDUs) are also contributing to the new infections (UNAIDS, 2009). A study on inmates in three prisons in Nsawam and Accra found high HIV prevalence (19%) among inmates as a result of sex between men and injecting drug users (IDUs) (UNAIDS, 2010). The proportions of new infections among people in stable "low risk" partnerships are often high. In Ghana, 30% of the estimated incident HIV infections in 2008 were accounted for by low risk heterosexual contact (Bosu et al., 2009).

The UNAIDS estimated people living with HIV/AIDS (PLWHA) in Ghana was 240,802 (100,228 males and 140,574 females) as at the end of 2009 with adult HIV prevalence rate 1.9% (1.7 – 2.2%) (USAIDS, 2010; NACP, 2010). The HIV prevalence in Ghana varies with geographic areas, gender, age and residence. It differs a very little between urban and rural areas of Ghana but more apparent in regional differences. HIV prevalence ranged from 0.7% in North Tongu district in the Northern Region to 5.8% in Agomanya and Koforidua in the Eastern Region (NACP, 2010). Figures 2 and 3 show Ghana's HIV prevalence by regions and ages from 2006 to 2009 respectively.



Source: NACP, 2009 HSS 2010

Figure 2: Trend in Ghana Regional HIV Prevalence (%) from 2006 – 2009



Source: NACP, 2009 HSS 2010

Figure 3: HIV Prevalence by Age group in 2006 - 2009

The Regional prevalence ranged from 2.0% in the Northern Region to 4.2% in the Eastern Region (NACP, 2010). Although all regions with the exception of the Eastern showed a rise in prevalence, the trend analysis over years indicate a general decline in HIV prevalence in 9 out of the 10 regions (NACP, 2010). HIV prevalence ranges from 1.2% among pregnant women in the Northern Region (lowest) to 4.7% in the Eastern Region (highest) (UNAIDS, 2010). In 2009, the prevalence was highest in the 40 – 44 year groups (4.0%) and lowest in the 45 – 49 year group, (1.8%). The prevalence in the young people aged 15 – 24 years was 2.1%, which was higher than in 2008 (1.9%) (NACP, 2010).

Married women are three times at risk of infection than unmarried women while mobility is the risk factor among men. High levels of transactional sex, high-risk behaviours among the youth,

marriage and gender relations that disadvantage women and make them vulnerable to HIV, urbanization, high levels of poverty and inaccurate perceptions of personal risk are factors that put Ghana at risk of a broader epidemic (UNAIDS, 2010).

HIV prevalence in most-at-risk-groups (MARPS) has been consistently higher than the general population. In 2009, the HIV prevalence among sex workers was 25.1% while the national prevalence was 1.9%, a decline from the 34% in 2006 with the national prevalence 3.2% (NACP, 2010). Female sex workers (FSWs) and their clients are the most-at-risk and the main drivers of the epidemic in Ghana. FSWs and men who have sex with men (MSM) contribute disproportionately to the new infections in Ghana (UNGASS, 2010). Evidence from a study conducted by Strengthening HI/AIDS Response Partnerships (SHARP) in 2006 on FSWs found that 52% of stationary and 37% of mobile FSWs in Accra were HIV positive. Differences in the spread of the epidemic can be accounted for by a complex interplay of behaviour and biological factors that affect the probability of HIV transmission per sex act. Sexual behaviour patterns are determined by cultural and socioeconomic contexts (Buve et al., 2001).

2.3 Impact of HIV/AIDS on education

Education is one of the sectors which are being devastated by HIV/AIDS in sub-Saharan Africa countries affected by the pandemic (EFA Global Monitoring Report, 2006). Absence of appropriate responses in this sector will decimate the human resource infrastructure and their economic output will be greatly lost with the social and economic cost of the pandemic risk (Carr-Hill et al., 2002). Among the 2.5 million children estimated to be living with HIV worldwide 2.3 million are in sub-Saharan Africa (UNAIDS, 2010). Children of school going ages are the most affected as a result of HIV/AIDS as they live with sick relatives in households stressed by the drain on their resources. These children will be emotionally and physically vulnerable by the illness or death of one or both parents (Ssengonzi et al., 2004). Single or double orphaned children, especially the girl child, are likely to drop out of school or stay home to care for the sick and may be pulled into the informal economy to supplement lost income (Carr-Hill, et al., 2002; Ijumba, 2010). This does not help to meet the gender equality in schools (UNGEI, 2006).

As deaths of the reproductive age groups increase in countries affected by the pandemic, relatively fewer children are being born to go to school. Moreover, caretakers of orphans will increasingly find it difficult to educate these children (Ghosh and Kalipeni, 2004). Furthermore, HIV/AIDS impact on teachers reduces their number, availability, quality and productivity (Risley and Bundy, 2007). This coupled with fewer students' enrolment in schools and low demand for places in education programmes may lead to a reduction in supply of facilities and places (Risley and Bundy, 2007). Schools with very low students' enrolments may be closed down and the remaining students moved to other schools thereby inconveniencing their education. The quality of teaching and learning will be affected by teachers' absenteeism due to illness (Carr-Hill, 2002). This affects the quality and availability of education (Risley and Drake, 2007).

Studies from southern Africa and south East Asia show that HIV/AIDS negatively impact on demand for and supply of education (Gachui, 1999; Risley and Drake, 2007). Results showed that orphaned children were either pulled out of school or not enrolled at all due to financial constraints of the affected families. They tend to head or provide for the households. Girls were the most vulnerable in this respect. In Kenya, parental deaths affected children's progress through school. In Tanzania, the death of an adult household member delayed the enrolment of younger children but tried to keep older children enrolled. In Malawi, death of adult encouraged children to early marry, drop out of school to support the family and take up informal labour work. In Zambia, more than an estimated 7% of about 2 million households were headed by

children (Gachui, 1999). The reduction in primary school enrolment has a positive correlation effect on secondary and post-secondary enrolments. High infant mortality rates due to HIV/AIDS also reduce the number of children in school.

Evidence from a study by Ssengonzi et al., (2004) on Nigeria's education showed that 11% of the school administrators agreed that HIV/AIDS had affected school work. The disease increased teachers' absenteeism due to death and illness, decreased enrolment of students and psychologically and emotionally affected both staff and students. The study also showed that almost one in every five head teacher/deputy head teacher from Nasarawa indicated that HIV/AIDS had affected their students' performance compared to 15% of respondents from Kano and none from Lagos. Reduced pupils' enrolment and poor performance in school were two major impacts of HIV/AIDS. Almost 60% of respondents indicated that children infected or affected by HIV/AIDS need love and emotional support compared to 30% who indicated nutrition and shelter.

2.4 Poverty and HIV infection

Poverty creates a milieu of risk for disease infection through innumerable mechanisms such as a result of unemployment, hunger and malnutrition, lack of basic services, inability to pay or access to health care, disintegration of families, vulnerability, homelessness and often hopelessness (Poku, 2005). The association between poverty and HIV/AIDS is a subject which has been debated by a lot of scientists and of great concern to governments, donor agencies and the United Nations (UN) (Cohen, 2005; Gould, 2005). It is known that socio-economic elements like poverty create risky situations for people which sometimes drive them into seeking remuneration for sex. The view that poverty leading to risky behaviour is the major pathway through which the disease is spread is not totally the case, although this may be certainly one of the causes to the spread of the disease. To a female adolescent whose parents cannot afford to meet her immediate pressing needs such as food, clothing, school fees and other basic needs, despite being aware of the risk of HIV infection through unprotected sex will be ready to give in to man who can provide these needs (Wamoyl et al., 2010a).

A study by Tladi (2006) on women between ages 15 to 49 years in South Africa showed poverty-related characteristics of low education and low knowledge to avoid HIV infection increase risk of HIV infection among the poor than the non-poor. Moreover, the poor and the less educated were more likely not to use condoms than the non-poor. Women who depend financially on their partners as well as those from households where hunger was a common phenomenon seldom used condoms than those who did not receive money from their partners because their partners disliked condoms and they had no power to negotiate for safer sex. The results revealed that poverty-HIV/AIDS relationship that increased susceptibility to HIV was a result of both low and high socio-economic status of the people involved.

The 2008 Zambia Demographic Health Survey showed that Luapula province had towns with poverty levels as high as 78% against the national average of 64% and a higher HIV prevalence than the national prevalence of 14.3% among the ages of 15 to 49 years (IRIN PlusNews, 2011). An estimated 70% of the teenage girls showed incidences of early pregnancy and child marriages due to poverty and tradition. Girls were sources of wealth to the family and were early married to bring funds to the family. About 60% of the girls between the ages of 13 to 14 years were school drop outs. Child marriages put the girls at risk of HIV infection since they depended mainly on the men, they could not negotiate for safer sex even if they are aware that the men had other sexual partners. HIV infection among women in Luapula was 18% with 40% mother-to-child transmission.

Chapolo and Jayne (2005) cited by Gillespie (2006) showed that irrespective of the poverty status, both men and women who lived 2 months or more away from home per year in 2000/01 period were likely to die of disease-related causes between 2002 and 2004 than men and women of the same characteristics who stayed at home. Women from relatively poor households with formal or informal business income were less likely to die from disease-related causes than the poor women who did not have any formal or informal business activity (Chapolo and Jayne, 2005). This finding supports a study by Epstein (2002, 2003) that indicated female members in poorer households with few employment opportunities are more likely to engage in riskier sexual activities for economic reasons exposing them to HIV infection. Relative economic disadvantage significantly increase the likelihood of a variety of unsafe sexual behaviours and experiences in KwaZulu-Natal Province of South Africa (Hallman and Grant, 2004).

However, Chapolo and Jayne (2005) also found that women from relatively nonpoor households with formal or informal business income are 10% more likely to die from disease-related causes than women with similar characteristics without business income. These nonpoor women with business income are likely to spend more time away from home to do business and have social interactions with different people than poor women who stay at home. Competition for customers, suppliers, transport service providers and many other people involved in their businesses may in turn create risk factors for HIV infection for these nonpoor women with business income.

2.5 Parental influence on female adolescents' sexual activities

Adolescents, especially those living in the poorest communities are forced into unsafe sexual practices by economic, social and cultural pressures (Anarfi, 2000). One of the HIV prevention goals is to delay sexual debut for as long as possible. This reduces the risk to HIV exposure and reduces the susceptibility to HIV infection for females (GAC, 2010). According to the Ghana Statistical Service (2009) report on the 2008 Ghana Demographic and Health Survey, 25.1% of females and 33% of males from the ages of 15 to 24 years in 2007 correctly knew about ways of preventing sexually transmission of HIV and rejected major misconception about HIV transmission. In 2008, 28.3% of females and 34.2% of males of the same age groups had correct information about sexual transmission of HIV. This showed a slight increase from the previous year.

In 2008, females who have had their first sexual intercourse before the age 15 years were from the ages of 15 to 24 years (7.8%), 15 to 19 years (8.2%) and 20 to 24 years (7.2%). Their male counterparts were; from 15 to 24 years (4.3%), 15 to 19 years (3.6%) and 20 to 24 years (5.2%). This showed that the female adolescent from the ages of 15 to 19 years early becomes sexually active and engages in much sex than the male counterpart. Among the ages of 15 to 49 years, 33.4% of females and 55.3% of males used condoms in their last sexual encounter in 2006 (GAC, 2009). The sexual activeness of these adolescents makes them more susceptible to HIV because they engage in early sexual activities when their genital tracts are physiologically immature.

Parent-child relationships especially in poor households are impacted when the socio-economic environment of a place changes. Parental behavioural control over their children and parental influence on adolescents' sexual behaviour are affected by these changes (Wamoyi et al., 2010b). A study on young people aged between 14 and 24 years and their parents in Tanzania, showed that socio-economic changes in education, values and material needs provision affected parent-young person's relationships (Wamoyi, 2010b). When parents found it difficult to provide for the young people, the young people tend to contribute to the economic needs of the

families. Parental control over their children sexual and non-sexual matters lessens as a result of the support these children bring. This control of parents over their children eventually wanes when the young people become more educated and emerge as the families' bread winners and decision makers in their own rights. The adolescent girl becomes more susceptible to HIV especially when the parents even encourage them to go for older men with money. Such girls often face sexual violence and unprotected sex due to power differentials (Madise et al., 2007).

Parents of young people aged between 14 and 24 years in a rural Tanzanian setting accepted transactional sex was the only easiest way as a female to exploit your sexuality for pleasure and material gain (Wamoyi et al., 2010b). These females thought men were stupid to pay for "goods" (vagina) they could not take away. These young women perceived their exploitation of the female body to be good and ascribed the associated health risks to be bad luck even though they were aware of them. Evidence shows that transactional sex is associated with undesirable sexual reproductive health (SRH), with consequences like unintended pregnancy, abortions, sexual violence and HIV and STIs (Dunkle et al., 2004).

2.6 Adolescents' behaviours and HIV

Transactional sex is reported to encourage partner change in that at the beginning of the relationship, the female is held in high esteem and made to feel comfortable (Wamoyi et al., 2010b; White et al., 2006). Adolescent girls are given high money to entice them into the relationship. This means females get more from new relationships and are motivated to go in for new partners. Also transactional sex is known to encourage age-disparate and intergenerational sexual relationships where young women go in for older men who are financially well established and responsible (Longfield et al., 2004; Luke 2004). These older men also have multiple partners and this compound the girl's risk of contracting HIV and other STIs. Many adolescent girls enter into age-disparate and intergenerational transactional sex in order to satisfy their material needs (Wamoyi et al., 2010b). These girls may have casual sexual activities with multiple partners or even agree to have sex without a condom. In some cases where parents even provide the basic needs for the girls, they still engage in transactional sex to show off in schools. Young women face disproportionate risk of HIV infection due to their involvement in intergenerational sexual relationships which is high in sub-Saharan Africa (Leclerc-Madlala, 2008).

A study conducted in Uganda showed that people with untreated STIs are at a higher risk of HIV infection (Mermin et al, 2008). The study showed that people with symptomatic herpes simplex virus type 2 (HSV-2) infections is four times at risk of HIV infection than those without it. In East and West Africa, evidence show that more than half of all new infections could be attributed to STIs (White et al., 2008).

Alcohol abuse is correlated with increased sexual risk behaviour (Van Tieu and Koblin, 2009). Researchers have discovered a link between strong dose-response relationship between alcohol use and risky sexual behaviours with heavy or problem drinkers engaging in greater risky behaviours than moderate drinkers (Weiser et al., 2006). Botswana women who use alcohol heavily are 8.5 times more likely to sell sex than other women (UNAIDS, 2009).

2.7 Petroleum Production and HIV

Evidence links the spread of HIV in the oil producing Niger Delta of Nigeria to factors like poverty, migration and sex work (Udoh, 2006; Udoh et al., 2008). These factors increase vulnerability to HIV and other STIs among women and the youth in the region (Omorodion, 2006). Studies by Posel (2004) and Hill (2005) show a close correlation between labour migration and the spread of HIV in sub-Saharan Africa. The discovery of crude oil, its commercial production and influx of foreigners as well as local migrants in the Niger Delta has made an epicenter of STIs susceptibility among the local population, especially females, long before the discovery of HIV (Udonwa et al., 2004; Adeokun, 2006). Studies conducted on residents and non-residents in rural South Africa in relation to mobility and migration showed that migration increased the HIV prevalence in the communities. (Welz et al., 2007). The nonresident females were the most infected with HIV.

The discovery of gold on the Witwatersrand in 1886 in South Africa brought in labour from all over the country and the region. Migration is one of the many social factors that have contributed to the AIDS epidemic (Lurie et al., 2003). Studies have shown that “circular” or “oscillatory” migrants i.e. migrants who regularly return home are at higher risk for HIV and other STIs infection than people who are in more stable living arrangements (Brewer et al., 1998). Other studies have also shown that men who live away from their wives or regular sex partners are more likely than those who live with their wives or regular sex partners to have additional sex partners and are therefore likely to become infected with HIV or other STIs (Lurie et al., 2003).

Davis and Kalu-Nwivu (2001) indicate that women and young girls who due to poverty and their inability to get employment resort to commercial sex, thereby increasing their susceptibility to HIV. HIV positive migrants returning to their communities may transmit the virus to their sex partners. Sex therefore becomes a tool of commerce available to those who have the means to pay for it and sustaining those who exchange sexual favour for subsistence (Nwauche and Akani, 2006; Omorodion, 2006). The sexual behaviour of wealthy oil workers and few wealthy local oil beneficiaries support unregulated sex industry which expose sex workers to unprotected sex and the risk of STIs including HIV (Udoh, 2009). Oil workers separated from their wives or regular sexual partners are also susceptible to HIV and the other STIs through unprotected sex.

2.8 Conclusion

This chapter has highlighted the worst impact of AIDS on the education sector and shown the influence of petroleum production in the spread of the pandemic. Poverty creates risky situations for vulnerable groups including the female secondary students to engage in risky behaviours and livelihoods such as provision of sex for money in order to survive. This makes them susceptible to HIV. The inflow of oil money into Sekondi-Takoradi has worsened the cost of living thereby creating risky environment for these vulnerable groups. HIV in Ghana is mainly transmitted through sexual intercourse and therefore if oil production will create risky situations for people to be susceptible to HIV, then vigorous education should be made to create awareness of HIV/AIDS. Understanding the factors that influence susceptibility to HIV is the first step to respond to the disease.

Chapter 3 Research Methodology

3.1 Introduction

This chapter focuses on the research study area, the sampling strategy i.e. the sample size and selection, the methods used for data collection, data management and analysis and the strengths and limitations of the data. The study used both quantitative and qualitative methods for primary and secondary data. The quantitative method used semi-structured questionnaires for a survey. The qualitative method used interview, focus group discussion and desk study. These methods used helped the research to get adequate data on the indicators that make Takoradi Senior High School (TSHS).

3.2 Study area

The research study is aimed at understanding how the socioeconomic factors at home and community and the school learning environment influence the female students of TSHS to be susceptible to HIV in Sekondi-Takoradi (S-T). TSHS is strategically situated in the centre of S-T and surrounded by many communities with various socioeconomic backgrounds ranging from poor to rich feeding the school with students. Although, TSHS is a day school without accommodation facilities, it also gets students from different regions of Ghana who later have to accommodate themselves in hostels with no parental supervision. This gives students the liberty to run their own lives as they wish creating a risky situation for them and making them vulnerable. TSHS has a large female student population with some having a reputation of being sexually active and engage in sexual activities in the city. Also, due to the day system of running and the absence of a fence wall around the school, students had easy access to and from the school and usually escape classes and go to town to do whatever they want. This creates risky situations which can lead students into risky behaviours to raise their susceptibility to HIV. These features of TSHS make it a good specimen for selection for the study.

3.3 Sampling strategy

The researcher's interest to understand the factors that make senior secondary school girls in Sekondi-Takoradi, especially those from TSHS, to be susceptible to HIV was influenced by the researcher's conviction of the risk that some of these female students will have in view of the rapid economic growth in S-T and the widening gap between the majority poor and the few rich. The researcher intends to share the results of the study with the Metro Education Authority and the management of TSHS to help reduce the impact of this situation.

10 copies of the final draft sample of the anonymous questionnaire were distributed to some selected female students to evaluate their level of understanding of the questionnaire and to help make any corrections that might be necessary to have good data. 45 female students from TSHS aged between 15 and 20 years were carefully selected from the first, second and third year groups for the anonymous questionnaire. The fourth year group was not selected because they had written their final external examination and will not be available for the exercise. Each year group had 15 students representation. The research's initial expectation was to have a fair representation of students from communities with different socioeconomic background for the exercise. This is to help the research to find a link between the poor neighbourhood and the level of risk of susceptibility to HIV due to risk situations poverty pose . But during the actual field work, TSHS was on vacation and students then attending vacation classes were mostly from the rich communities since students had to pay for the classes. This did not give the opportunity to have the full complement of the student body of TSHS to have the true

representation. However, the research had the 15 students from each year group to do the survey.

For the focus group discussion (FGD), 10 students each from year 1, 2 and 3 were selected for the discussion exercise. Here also the research's expectation for the different socioeconomic background representations did not materialize. The students selected did not take part in answering the questionnaires. Each year group had their discussion session separately so as to make them feel comfortable to speak their mind freely without any fear of intimidation or victimization by another group.

The headmaster, assistant headmistress for academics and bursar were the key informants chosen for the interviews. Unfortunately, as TSHS was on recession, only the assistant headmistress for academics was available for the interview during the actual field work. However, she was willing to give the data needed for the research. Table 1 presents the number of respondents and the methods used for data collection.

Table 1: **Number of respondents per category**

Category	Method of data collection	Number of respondents
Year 1 students	Questionnaires	15
Year 2 students		15
Year 3 students		15
Year 1 students	Focus Group Discussion (FGD)	10
Year 2 students		10
Year 3 students		10
Assistant Headmistress	Interview	1
Total		76

Source: The author

3.4 Method for data collection

In gathering data to understand how TSHS female students are susceptible to HIV, the following tools were employed to achieve that aim.

3.4.1 Anonymous questionnaire

The anonymous questionnaire was used due to the sensitivity of the subject area of the research study which most people will be reluctant to participate in such an exercise if their identity will be exposed or even if they had to speak out about it. The anonymity of the respondents is to encourage them to participate and also to give the true responses or facts which are very essential for the credibility of the research study. The anonymous questionnaire is adopted as a data collection tool for the research to give a quick overview on the levels of the students' involvement in risky behaviours that make them more susceptible to HIV infection and how they are engaged in these behaviours. A total of 45 TSHS female students comprising 15 each from years 1, 2 and 3 were surveyed using a self-administered semi-structured anonymous questionnaire (opened and closed). Due to the difficulty in getting all the 45 students at a goal the questionnaire survey was done in two sessions on two days. The first session involved the years 1 and 2. The year 3 had their session on the next day. Before each

session, students were assured of the confidentiality of their identity and the need for them to feel free and answer the questions with all sincerity for a credible research study since the information is being taken to the Netherlands and no one can link it to them. Some minutes was taken to read through the questionnaire and the different sections explained to the students. Some students asked if they could take the questionnaire home but that was rejected because it could compromise their answering of the questionnaire at home. Unfortunately, one respondent's form was not received. Therefore only 44 respondents' data was used for the research study.

3.4.2 Focus group discussion

Focus group discussion is adopted because the research intends to obtain adequate information by probing the students' views on what causes them to engage in risky behaviours and their perception of the influence of rapid economic growth in Sekondi-Takoradi to the spread of HIV. Students were again assured of confidentiality of the information they give as well as their identities. Each year group was met separately for the discussion. This was done to get the students feel comfortable and speak freely and be sincere with the information they give. The topic of the research, its objectives and what the students had to do were explained to them at each session. Using the topic checklist, face-to-face discussions were held for a maximum of one hour. Carefully, data were transcribed while also listening to the students as they give their views.

3.4.3 Interviews

An appointment was made with the assistant headmistress after confirmation that the headmaster and bursar will not be available for the interviews. The purpose of the study and its objectives were explained to the headmistress. This interview was held to get information on how the school learning environment makes TSHS female students susceptible to HIV. Using a generated checklist, discussion was held for 30 minutes because the headmistress had other appointments to attend and could only spare that time.

3.4.4 Desk study

The desk study was used to gather secondary data to complement the primary data from the questionnaires, FGD and interviews to write the research study. It was part of the research proposal writing including the literature reviews.

3.5 Data management and analysis

Data analysis began in TSHS with reflection on the data from the questionnaire forms in order to choose the main questions for discussion during the focus group discussion. The different sources of data were handled both independently and concurrently. For example, questionnaire forms, FGD data and interview were analysed both independently and concurrently because they supplemented each other and give global and complete information. Data which was not consistent or realistic was observed more critically and when there was no argument to justify them, it was not consider during the analysis.

Questionnaire forms, FGD and interview

Questionnaire forms data collected and transcribed on a hard copy were coded for relevant themes using the Excel quantitative data analysis software. Field notes were coded and taken through the process of interpretation. All data were analysed by reading and interpreting. Data collected for focus group discussion and interview were through listening and interpretation.

3.6 Limitations to the study

The research study had a number of constraints even before the start of the field work. The theft of the researcher's laptop with all information on the research study brought a great setback to the research process since everything had to be restarted.

Readily getting the respondents for the questionnaire, FGD and interview was very difficult. As TSHS was on vacation during the time of the field work, only students who could afford the vacation classes fees were present. It was difficult for the research to get the 75 female students from year 1 to 3 from many communities with different socioeconomic backgrounds to administer the questionnaire for the survey. Time was limited for students because they had to attend classes. The research used 2 weeks to get students willing to participate in the exercise.

In both the questionnaire and FGD, the respondents were hesitant to open up and tell their personal experiences. In the questionnaire, most respondents almost ticked "NO" throughout even where it was an obvious "YES". Even though everything was done to make respondents feel free and speak, they were still hesitant maybe out of fear of being condemned by the rest of the group. The impression was that many respondents did not reveal all their experiences and opinion. The fact that the research was done by a teacher known to the respondents made them felt uneasy. The outcome could have been different if an external person had done the research study which would have made students comfortable to give more sincere data. One respondent's form was not returned reducing the research study to 44 respondent's data instead of 45 respondents' data.

Time limitation was also a constraint in the interview with the headmistress. The researcher called on her many times before finally having an appointment for a short duration of time. This limited her data. The unavailability of the headmaster and bursar limited some detailed information which could have been obtained from them.

Chapter 4 Presentation and Interpretation of Findings

This chapter presents the results of the field research from the questionnaire, focus group discussions and interview with key informant as well as desk study on the society of Sekondi-Takoradi. The results from the questionnaire demonstrate the socioeconomic factors that show poverty and gender inequality at the students' home and the influence of peers on students' behaviours. Students' perception, behaviours and general knowledge on HIV/AIDS influencing their susceptibility to HIV are investigated in the questionnaire. The findings from the focus group discussions, interviews and desk study help to have a deeper understanding of the questionnaire issues and help to understand how the environment of Sekondi-Takoradi as well as the learning environment of TSHS contribute to students susceptibility to HIV.

4.1 Profiles of the selected respondents

Takoradi Senior High School has a female student population of 939 comprising 334 (SHS1), 310 (SHS2) and 295 (SHS3). 76 respondents, all females were used in the field research because 2 male key informants were not available during the time of the study. 45 students filled the questionnaire; however, 1 form of a year 2 respondent's was not received. Therefore, 44 respondents' data from the questionnaire was used in the research study. 30 students and 1 assistant headmistress were used for the FGD and interview respectively but are not considered as respondents here in the study except those for the questionnaire. This is because their general information was not collected to be shown here. Respondents were selected from year 1 to 3 aged between 15 to 20 years.

Table 2: **Ages of respondents per year grade**

Ages	Year grade			Total
	1	2	3	
15	2	0	0	2
16	9	5	1	15
17	4	7	5	16
18	0	1	5	6
19	0	1	3	4
21	0	0	1	1

Source: Author

The respondents of the questionnaire were grouped into 3 based on the community areas of their residence using the poverty mapping of Sekondi-Takoradi by the CHF International and STMA on the daily household income into "Rich, Middle and Poor" areas because poverty of the parents may be a factor for students' susceptibility. The data will help to find how these community areas contribute to students' susceptibility to HIV. Table 3 shows the community areas of the respondents.

Table 3: **Number and Percentage (%) of respondents and their community areas**

Community Areas	Total of respondents	Percentage (%) of respondents
Rich	34	77
Middle	6	14
Poor	4	9

Source: Author

The data show that majority of the respondents live in communities where an average household income per day is \$17.67 and above while a minority of the respondents lives in communities where daily income average is \$3.66 or below. This can mainly be attributed to the fact that students have to pay for the vacation classes which were going on during the time of the field research and some parents especially from the poor communities would rather like to save money for the beginning of the new term.

4.2 Socio-economic factors influencing susceptibility

The socio-economic factors influencing students' susceptibility to HIV are the income levels of their caretakers, gender inequality and peer pressure to engage in risky behaviours. The income level of students' caretakers greatly determines where they can live in Sekondi-Takoradi, the family size they can have and care for, and children to sponsor to school.

4.2.1 Employment of respondents' caretakers

The findings of the study show that all the girls have one or both parents being employed and caring for them. The majority of respondents living in the rich communities have their caretakers working in their own businesses or with a private company. Only few work in government institutions or have other jobs. Almost the same number of caretakers from the middle and poor communities work in the 3 employment areas. Table 4 shows the types of employment of the respondents' caretakers and their community areas.

Table 4: **Employment of respondent' caretakers and their community areas**

Types of employment	Respondents' caretakers and their community areas			Total	Percentage (%) working at each employment
	Rich	Middle	Poor		
Working with government	4	2	2	8	16
Has his/her own business	18	3	2	23	46
Works with private company	14	1	1	16	32
Other jobs	3	0	0	3	6
Total	39	6	5	50	
Percentage (%) of caretakers from each community working	78	12	10		

Source: Author

Government sector workers in Ghana are among the least paid. They seldom invest their low salary thereby limiting them from having other sources of income. Most tend to borrow to survive within the month and pay back when they receive their salaries at the end of the month. The slow flows of their income even though it comes regularly; usually delay them in implementing most urgent tasks like paying students school fees, medical bills, etc. Majority of them do not have extra sources of income which leaves them financially unstable. This does not help them to provide adequately for their wards even when they wish to do so. This in a way creates a risky situation for the adolescent girl who might want some things that may not be essential to the parents to provide.

In Takoradi, people who work with private companies or have their businesses have other sources of income such as shops. The regular flow of their income from these sources gives them some financial stability and can afford to stay in rich communities where accommodation

rents are very high. They usually do not have problems in providing the needs of their children thereby minimizing the situations which compel their wards to look elsewhere to satisfy their wants. The majority of respondents coming from the rich communities confirm that their parents can afford to pay for their classes. This also shows why majority of the respondents from the rich communities have their caretakers either having their own businesses or work with private companies.

Owning a business in the rich communities is completely different from owning a business in the poor communities. Businesses in the rich communities are of high capital intensive and are mainly supermarkets and other service providers to help the neighbours who normally return from work late. Prices of goods and services there are expensive because people can afford them. In the poor communities the main businesses operating there are petty trading involving the sale of foodstuff ingredients and other basic essentials. These products are less expensive to buy because of the general low income levels of the neighbourhood. Such businesses are mainly of small capitals.

4.2.2 Provision of students basic needs

Traditionally, it was the man who provides for the family. Economic situations and the increase in women with wealth have made it a collective responsibility. However, in homes where the women provide more, it becomes difficult for the man to have much influence on the children. This usually gives the children the opportunity to have their way as most mothers usually are soft on their children. This thereby put them at risk of engaging in risky behaviours. This aspect of the study was to find out which of the parents provide much of the respondents needs so as establish a link with their susceptibility to HIV. The result findings showed that the fathers from the rich communities are the main providers of the respondents' basic needs. This shows that the fathers have great influence on their wards which in turn minimizes the chances of them engaging in risky behaviours. However, it was difficult to establish if there was any discrimination in providing for the two sexes at home. Table 5 below shows the number of providers of respondents' basic needs from the three communities.

Table 5: **Providers of respondents' basic needs from the three communities**

Basic needs of respondents	Number of providers / community areas								
	Rich			Middle			Poor		
	Father	Mother	Other relations	Father	Mother	Other relatives	Father	mother	Other relatives
School fees	29	7	4	2	3	1	1	3	0
Food	28	11	2	4	3	0	2	2	0
Clothing	15	28	4	2	6	0	1	4	0
Accommodation	27	6	5	3	2	1	2	3	0
Healthcare	26	14	3	3	3	0	1	3	0

Source: Author

From the findings of the study, mothers are the sole providers of almost all the basic needs of the students coming from the poor communities. In the Ghanaian culture, the extended family plays a major role in taking care of their relatives who might be in need of help. It is however interesting to notice that no relative is helping in providing the basic needs of the students coming from the poor communities. This might bring a lot of hardships on the mothers providing for the students to do it alone. It might therefore be a contributing factor to the majority of the students from the poor communities being sexually harassed. It may be that, these students in

their quest to support themselves, fall victims to the perpetrators of these attacks including some of their own relatives.

Table 6: **Number of respondents sexually harassed**

Year Grade	Community Areas					
	Rich		Middle		Poor	
	Yes	No	Yes	No	Yes	No
1	2	7	2	0	0	0
2	5	7	1	1	0	0
3	5	4	1	1	3	1
Total	12	18	4	2	3	1
Total number of respondents per community	30		6		4	
Percentage (%) sexually harassed per community	40		67		75	

Source: Author

4.2.3 Education of the girl child

In most African culture, girls are perceived as sources of wealth to the family and not as means of carrying along the family name. They are therefore discriminated against in many ways including education. This part of the study was to find out whether the respondents' families discriminate against the female children in providing education. Educated females have greater chances of being less susceptible to HIV. They have opportunities to enter into good employment, decide when to marry and can take good care of their children. To find out from the respondents to establish if the females have less access to education, the research posed this question; how many of your family members of school going age (male and female) are going to school? The results of the question are shown in the table below.

Table 7: **Males and females of school going age and those going to school from respondents families**

Respondents' families	Rich		Middle		Poor	
	Males	Females	Males	Females	Males	females
School going age	37	74	6	12	4	7
Actually going to school	31	70	5	12	2	6
Differences	6	4	1	0	2	1
Percentage (%) of differences	16	5	17	0	50	14

Source: Author

From the table, the findings show that more females go to school than males. This was not what the study had expected to find because some Ghanaian culture still provides less access for females to education. This is a finding which the research will like to pursue in further to establish why. One reason the study can assign to this development will be the secular makeup of the inhabitants of Sekondi-Takoradi. One benefit of this finding is that the female students will have greater opportunities to develop themselves. They will have the opportunity to earn good jobs and income making them less susceptible to HIV from poverty.

4.2.4 Students working for caretakers

From the study findings 6 out of 42 respondents work to help their caretakers financially. It is normal for adolescent girls to help their parents to earn extra income by selling. Most of the time, these girls are lured by adults in the pretence of buying to sexually assault and violate them making them susceptible to STIs. This part of the study was therefore to establish if the students sell and if they had ever been sexually abused. Unfortunately, none of the respondents specified this but responded generally of experiencing sexual harassment.

4.2.5 Sexual harassment and violence against students

The survey showed 19 out of 40 respondents have ever experienced sexual harassment from men. 12 of them came from the rich communities, 4 from the middle communities while 3 come from the poor communities. 4 respondents are always harassed by men, 9 often and 6 seldom harassed by men.

Table 8: **Number of respondents sexually harassed**

Year Grade	Community Areas					
	Rich		Middle		Poor	
	Yes	No	Yes	No	Yes	No
1	2	7	2	0	0	0
2	5	7	1	1	0	0
3	5	4	1	1	3	1
Total	12	18	4	2	3	1
Total number of respondents per community	30		6		4	
Percentage (%) sexually harassed per community	40		67		75	

Source: Author

Table 9: **Frequency of students' sexual harassment**

Frequency of sexual harassment by men	Year grade			Total	Percentage (%)
	1	2	3		
Always	0	2	2	4	21
Often	3	1	5	9	47
Seldom	1	3	2	6	32
Other					
Total	4	6	9	19	

Source: Author

On the issue of sexual harassment by a relative, 12 out of 44 respondents have experienced it. From the 12 respondents, 7 came from the rich communities, 4 from the middle and 1 from the poor communities. 3 of the victims always experience sexual harassment by relatives, 1 often, 4 seldom and 2 have only experienced once. 40 respondents out of the 44 who took the survey answered on the issue of sexual violence for refusing sex. 6 respondents specified they had been violently attacked for refusing sex.

These findings show a dangerous situation that creates a greater risk of susceptibility to HIV for these students. What makes it more serious is the fact that, relatives who these students know and trust abuse them. When this happens, the victims become traumatised and may find it difficult to confide in other relatives for fear of being sexually abused. Sexual harassment which ends in sex puts the victims at risk of STIs. During such acts abrasions and cuts can occur in the vagina of the female because she is forcibly penetrated. If the perpetrator is infected with any STIs including HIV, the victim can easily acquire it.

4.2.6 Peer pressure

The phenomenon “peer pressure” is another important source of students’ susceptibility to HIV. Peer pressure may operate in two ways. One way is where the friends introduce you into activities that may raise your susceptibility to HIV and the other way is where friends will isolate you from them and call you names for not engaging in some risky practices. When they isolate you for a long time, it will compel you to take up the challenge. In this study, the research concentrated on issues such as engagement in sex, smoking, alcoholism and getting sexual partners under the influence of peer pressure. Out of 44 respondents, 8 engage in sex under the influence of friends. The findings show that 5 of the respondents from the rich communities engage in sex under the influence of their peers. 2 students from the middle communities do the same while 1 student from the poor communities does have sex under peers’ influence. Furthermore, the same numbers of students from these communities get sexual partners through the influence of their peers.

These findings give a scenario that many students put themselves at risk of HIV infection through the influence of their friends. What makes it more worrying is that 2 out of the 4 students from the middle communities have sexual partners and sex under the influence of their peers. Similarly, 1 out of the 3 students from the poor communities also does the same. This might be that the students from the poor and middle communities may be having some problems with their parental control and influence over their sexual behaviours. This can create a highly risky situation for these students if they continue to associate with their peer group. It is very important for the parents to win the trust of their children to help them before it becomes too late when they are infected with HIV.

Alcohol abuse is a recipe for unsafe sexual activities that creates greater risk of susceptibility to HIV (Luginaah, 2007). It is therefore refreshing that despite 12 respondents do have alcohol under the influence of their peers; none of them has ever had sex under the influence of alcohol. However, it is important to note that alcohol consumption also stimulates these students to do things that might put them at risk of HIV. They therefore should be educated on the dangers of alcohol intake.

4.2.7 Students options to support basic needs

When faced with tough economic situations, people take drastic measures to survive forgoing all risks attached to their actions. The study tried to find out how students will support themselves if parents failed to do so.

From the findings majority of the respondents would prefer starting a small business or work in the supermarkets to support them provide their basic needs. This decision would help them reduce the situations that make them susceptible to HIV. The capital to start the business can also create new challenges which can make her susceptible to HIV. Similarly, the high unemployment and competition for fewer job vacancies can create risky situations for the girls

seeking employment in the supermarkets. If other job seekers are using their bodies for advantage, what would these girls do?

The least number of respondents would prefer to have sugar daddies or boyfriends to help supplement the basic needs. It is however strange that all these students come from the rich communities where it is seen that the parents can afford to cater for them. This can only be attributed to lust for material things which the parents would not like to provide for them. As the findings of the study show that peer pressure influence is great over some students, this can also be a factor for the risky behaviour preferred by these students.

4.2.8 Sex for money

From the FGD, majority of respondents knew of female students who were having sugar daddies sponsoring them. One cited an example of 2 sisters impregnated by the same man because of money. Students engage in sex for money because of poverty, influence of peer pressure for acceptance and recognition and lack of effective parental control. All respondents from FGD and questionnaires specified never to engage in sex for anything. However, majority of FGD respondents prefer an old rich man to a young guy because he can finance them and may not demand much sex unlike the young guy who will provide little but demand much sex. From the questionnaire survey, only 1 respondent from the middle communities will engage in sex for money. From 44 respondents, 10 respondents will have sex if a huge sum of money is offered to them. 7 of these respondents come from the rich communities, 2 from the middle communities and 1 from the poor communities. 7 respondents have had forced sex, 3 from the rich and middle communities with 1 from the poor communities. 4 of them often experience forced sex, 1 seldom go through forced sex and 2 have only once had forced sex.

Although the findings of the study show that students from the rich communities mostly had both parents providing for them, it was therefore surprising when majority of the students who would have sex for money came from the rich communities. These findings contend to Wamoyi et al., (2010) study on transactional sex in Tanzania that showed young adolescents do not always enter into transactional sex for essentials for survival, but most times for materials like cloths and beauty products. Students' lust for these things makes them engage in sex for money because their parents may not provide them with these things.

4.3 School learning environment factors

The school learning factors influencing students' susceptibility to HIV in this study are the school fees, structure of school curriculum on HIV/AIDS, teachers' supervision of students, teacher-student sexual relationships and power relations pertaining in the school.

4.3.1 School fees

The inability of parents to pay students' school fees on time creates a risky situation for the female students to find ways to support themselves. In 2010/2011 academic year at TSHS, SHS1 paid GH¢81.70 (€40.85), SHS2 GH¢198.80 (€99.40) and SHS3 GH¢160.50 (€80.25). Students whose parents do not pay on time are sent home to go for the money. According to the assistant headmistress, students of irresponsible parents are much at risk of engaging in sexual activities to fend for themselves. This put the students at risk of HIV infection. However, the school allows parents who have difficulty in paying the fees of their wards to arrange and pay in instalments which unfortunately many parents do not take advantage of either due to ignorance or irresponsibility. The delay payment of fees by parents sometimes prevent students

from writing their exams and may therefore not be promoted and have to repeat or drop out of school.

4.3.2 Structure of school curriculum on HIV/AIDS

Education is an effective tool to use in reducing the spread of HIV/AIDS. Unfortunately, most schools in Ghana do not use this tool which is readily available to them to accomplish this goal. Many schools do not have their own design mechanisms to use except the few topics in the science subjects curriculum. This is the situation TSHS finds itself. TSHS does not collaborate with any health institutions to either create awareness or help them screen both students and staff through Voluntary Counselling and Testing (VCT). However, the social sciences department includes HIV issues in the teaching of social studies. Biology teachers also address HIV/AIDS when teaching “reproduction” topics. NGOs organise training session for students to be peer counsellors.

4.3.3 Teachers supervision of students in TSHS

Supervision of students in TSHS is effective despite the absence of a fence wall around the school. Class masters and mistresses interact with students once every week to know their problems. Subject teachers are readily available to help students in their lessons. School prefects are always on duty to check students. The Counselling department effectively advises students through their guidance and counselling sessions. Teachers on duties go round to make sure students stay in class for teaching. Subject teachers check the roll before they start teaching to ensure students do not leave classes. Respondents of the FGD had good views of the teachers’ supervisions in TSHS. Majority indicated teachers come early to school to supervise the students perform their morning activities before classes start. They expressed teachers show great concern about students’ welfare and studies and therefore see teachers’ supervision as effective. However, a major problem in TSHS is students leaving school before closing. The headmistress admitted that students leaving school before closing are likely to engage in sexual activities to make them susceptible to HIV. FGD respondents also admitted that is a problem and students leave classes before school closes for reasons such as tiredness and boredom, going home to watch romantic soap operas and also to sleep.

4.3.4 Teacher-student sexual relationships and power relation

Respect for elder right in Africa is still a strong force to contend with in many societies. Ghana is no exclusion of elder right between the old and young in society. This makes it very difficult in many situations to talk back and challenge old people. The old take advantage of this and abuse young people especially females. All respondents admit teacher-student relationships exist in TSHS. The headmistress only admitted by saying “we know it is not going on and even if it is going on, it is certainly on the decrease”. Evaluation of questionnaire data shows 11 respondents out 44 have had proposals from male teachers which they rejected. 8 of the respondents came from the rich, 2 from the middle and 1 from the poor communities. 38 of respondents from the questionnaire knew of colleagues having sexual relationships with teachers for money and provisions; marks and exam question papers, love and pleasure.

All FGD respondents knew of student-teacher sexual relationships going on at TSHS. The worst culprits are the National Service Personnel (NSP) teachers posted to TSHS. They do this because they are young; mostly bachelors and not permanent teachers and can easily leave when it becomes necessary. One respondent had rejected one teacher’s proposal for a relationship. However, respondents deny any personal involvement in this practice and had no

plan of engaging in it. Majority believe the practice is increasing because both the NSPs and the students like it. Benefits cited were similar to those of the questionnaire respondents. FGD respondents revealed that teachers sometimes intentionally miss classes of students who reject their proposals or organise difficult exams to punish these classes to compel the class to force the students to give in. 6 of the respondents of the questionnaire have been victimized for refusing a teacher's proposal.

4.3.5 Pregnancy among students

Students become pregnant when they engage in unprotected sex. It is now common to find pregnant students even in the basic schools. From the assistant headmistress, the perception that TSHS female students are sexually active and engage in sexual activities is likely true. TSHS recorded about 5 pregnancy cases this academic year alone. However, she denied any teacher being involved with the pregnancies. It is a great possibility that these students are highly susceptible to HIV in view of the influx of oil workers and foreigners to Sekondi-Takoradi. Majority of the FGD respondents knew of at least 15 pregnancy cases since 2009 with about 2 teachers involved. None of these students completed her education at TSHS. However, TSHS does not prevent students from completing their education so far as they are willing to continue. Normally, TSHS gets students admission in another school so as to protect them from embarrassment, but if students insist to stay at TSHS they admit them. Both the headmistress and FGD respondents agreed that these students can be at risk of HIV infection because they usually have more than one sexual partner and do not use condoms to protect themselves.

4.3.6 Students' knowledge on HIV/AIDS

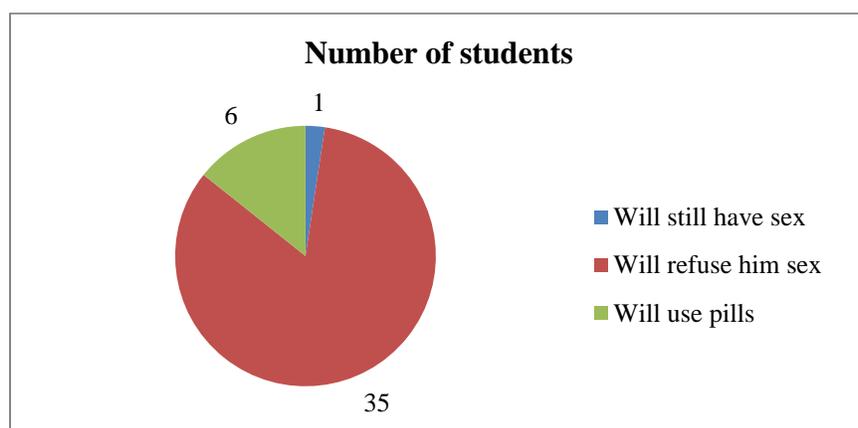
To ascertain students' knowledge on HIV/AIDS transmission, some questions (see questions in table below) were asked. From the evaluation, 14 respondents of year 1, 10 of year 2 and 9 of year 3 respondents answered correctly. This result shows the general knowledge of students on HIV/AIDS. In assessing the degree of students' knowledge on HIV prevention, 49 correct and 19 wrong responses were given. In the FGD, all respondents knew HIV causes AIDS and cannot be cured. However, one student knew antiretroviral drugs (ARVs) can prolong lives of people living with HIV/AIDS (PLWHA). Abstinence, condom use and avoidance of sharing objects especially sharp ones were the main means of HIV prevention mentioned. Deep kissing was mentioned as one way of transmitting HIV. Similarly, persistent diarrhoea, syphilis and swelling all over the body were some symptoms of HIV/AIDS mentioned. Majority of the FGD respondents believe HIV is increasing and is a serious issue in Sekondi-Takoradi due to the oil production in the region. A few believe the education going on is reducing it.

Table 10: **Level of students' knowledge on HIV transmission**

Questions	Number of students given the correct responses					
	Grade 1 15 respondents		Grade 2 14 respondents		Grade 3 15 respondents	
	Total	Percent (%)	Total	Percent (%)	Total	Percent (%)
Eating with an infected person from the same bowl	13	87	10	71	10	67
Having sex with an infected person	0	0	2	14	6	40
Using the same toilet facilities with an infected person	2	13	6	43	5	33
Kissing with a sore in your mouth with an infected person	15	100	1	7	3	20
Shaking hands with an infected person	14	93	10	71	9	60
Average percentage (%) of correct responses		73		41		44

Source: Author

In assessing safer sex among the respondents of the questionnaire survey the respondents were asked what will they do if their sexual partner will not use condom for sex. Out of 42 respondents, 1 specified will go ahead to have sex, 35 will refuse his sex and 6 will use pills.



Source: Author

Figure 4: **Actions taken by students for nonuse of condoms**

Although, the students showed some levels of knowledge on HIV/AIDS, from their response on how to deal with a risky situation revealed their inability to use this knowledge effectively and efficiently. The 1 respondent who would go ahead and have unprotected sex put herself and the partner at risk of STIs including HIV infection. Also condom use is not only for prevention of pregnancy but mainly for the prevention of HIV infection. Therefore the use of pills will only prevent pregnancy but leaves the user at greater risk of HIV infection. Ignorance of condom use creates greater susceptibility to HIV.

4.4 Factors from society of Sekondi-Takoradi

The factors from the society of Sekondi-Takoradi influencing students' susceptibility to HIV in this study are the high cost of living in Sekondi-Takoradi due to oil production, influx of migrants and foreigners to Sekondi-Takoradi and inflow of money into the economy of Sekondi-Takoradi.

4.4.1 Impact of oil production on cost of living in Sekondi-Takoradi

Although, oil production in the Western region is new, its impacts on residents of Sekondi-Takoradi have great. All respondents in FGD agreed that prices of goods and services have gone very high. The cause is attributed to the influx of oil workers and foreigners into Sekondi-Takoradi with a lot of money to spend. Prices of food, rent, transport fares, etc. have all gone high within a short spate of time. One respondent said "last year we paid GH¢180 (€90) for rent but this year we paid GH¢240 (€120)". Landlords are now throwing out tenants by increasing the rents beyond their capabilities. Majority also agreed that the money given to them by parents have reduced the home expenditure has increased. They cannot buy enough things with the money they get. Majority of FGD respondents believe female secondary school girls are at high risk of HIV infection due to the impact of oil production. In the construction of the Sekondi-Takoradi stadium in 2007 by the Chinese workers many girls in the surrounding towns got impregnated and as the oil production will even last longer, many girls already engaging in sexual activities are at risk of HIV infection. Other respondents showed that because of the money involved, students are at risk of HIV infection as some parents may even encourage their daughters to go out with oil workers to get money. The assistant headmistress agreed with this assertion that there is a great possibility for students to be highly susceptible to HIV.

4.5 Conclusion

From the findings of the study more girls are having access to education than boys. When more girls are educated they will become good wives and mothers and will have better job opportunities to care for their children. This will help minimize their susceptibility to HIV.

The influence of peer pressure has a lot of negative impact on the adolescent female which also creates a greater risk for her to be infected. If girls are ready to accept sexual partners from their peers and also have sex with them without thinking about the risk of contracting STIs, then there is a serious problem for parents and the society to handle. If HIV/AIDS is to reduce such risky behaviours should not be encouraged.

Poor mothers should be helped their relatives to take care of their children so as to reduce their susceptibility to HIV if they cannot continue providing for them.

Chapter 5 Analysis and discussion of key issues from findings

In this chapter, key issues in the findings in the previous chapter are discussed in relation to research questions, and compare to the other findings from literature. The discussion focuses on the findings that seek to dress the objectives as well as respond to the main research questions.

5.1 Poverty of parents

Wamoyi et al., (2010a) discovered on a study on transactional sex among young people in northern Tanzania that poverty of parents contribute to make adolescent females to engage in risky behaviours such as transactional sex to provide for themselves and their families. Risky situations such as this put the adolescent female at great danger of HIV infection. Although, it is the responsibility of parents to provide the good basic needs for their children, sometimes their economic situations do not help them to meet this obligation to their children. This was confirmed by the 9% of the respondents' families' members of school age who are not going to school. However, female children were not discriminated against in the education of the children. In fact, more females were attending school than the males. The assistant headmistress supported the accession of parents' poverty by indicating that some females are sent home for nonpayment of their school fees. Some of these students are not able to write their exams as a result of nonpayment of fees.

When parents' economic situations put adolescent females into such a risky situation, the likelihood of the girl to engage in transactional sex to support her needs is very great. For more financial stability and comfort, the student will start to have multiple sexual partners going out with them concurrently. This puts her at a greater susceptibility rate to HIV because of the power relations that usually play out in transactional sex relationships. Also, the majority of the students being provided for by their mothers from the poor communities may face such dilemma whereby because their mothers will not provide some non-essentials for them, they may be compelled to look for alternative sources to meet these wants. This accession is logic to think of especially when majority of the FGD respondents would prefer rich old men to finance them to young guys who cannot provide for them. Madise et al., (2007) explains that such girls face sexual violence and unprotected sex due to the power differentials in the relationship putting them at a greater risk of susceptibility to HIV.

5.2 Sexual harassment and violence against students

Watts et al., (1998) cited in WHO (2000) discovered in Zimbabwe that 26% of married women were forced to have sex when they do not want- 23% by physical force, 20% were shouted at by the partner; 12% were forced when asleep, 6% were threatened to have sex. This illustrates the strong link between physical and sexual abuse, with females often being beaten and forced to have sex. The cases of greater susceptibility of girls to HIV infection are both biological and socio-cultural. From the findings almost half of the questionnaire respondents specified being sexually abused and violated and in some instances by relatives which might be through coercion. The frequencies of attack range from being always attacked to one attack. These attacks put the girl at great risk of HIV infection. When sexual intercourse is forced, abrasions and cuts are likely to be created. In addition, condom use in such situation is not likely to happen. In such situations if the male perpetrator is infected with some STDs including HIV, the disease is likely to be transmitted to the female through the sexual fluids that might be secreted or through the blood via the abrasions in the vagina. The victim becomes traumatized and can prevent her from seeking early treatment for fear of victimization and stigma. Delay in seeking

medical attention reduces the girl immune system to fight the virus making it to spread faster within the body. Sexual harassment and violence create greater susceptibility for the students to HIV.

5.3 Peer pressure influence

In addressing the susceptibility of the youth to HIV infection at the International conference on HIV/AIDS, Killer (2002) argued that many young people felt compelled to behave in ways that will make them to be approved by their colleagues and peers. Young people are sensitive to the opinions of their peers and are reluctant to deviate from what they perceive to be the norms. He highlighted positive and negative influence of peer pressure. The negative influence forces young people to engage in risky sexual activities raising their susceptibility to HIV. The findings of the questionnaire respondents, majority of the students from the rich communities engage in sex and get sexual partners through the influence of peer pressure. In this position where the student is in subordination to her peers, she will readily accept and have sex with anyone that the peers will present to her so as to continue being accepted, forgoing all the risks attached to sex.

When the peer pressure becomes strong, this student will no longer listen to or share her secrets with the parents and only do what the peers tell her. Leach (2002) cited by Coetzee (2005) explains that the strong influence exerted by the peer group increases the pressure to enter into sexual relationships, sometimes with multiple partners. To conform and be more accepted by the group members from rich homes, students themselves engage in sexual activities to earn money and acquire luxuries to be par with the peer group. The risky behaviours of students make them highly susceptible to HIV.

5.4 Sex for money

Wamoyi et al., (2010b) discovered in a study on transactional sex among young people in rural Tanzania that major of the young women were prepared to stay in a sexual relationship so long as they continue to benefit materially. Young women often exchange sex for beauty products and clothes and not essentials for survival. They judged what their peers had received from their sexual partners by the type of clothes they wore and for those still in school, by their ability to afford food. Most of these young women are provided with their basic needs but do this due to lust for material things which their parents will not provide them because they are not essential. This confirms why 70% of the respondents who specified would have sex for money if the sum is very high come from the rich communities of the study. Also, the acceptance of a majority of the FGD respondents to go in for rich old men to finance them puts these students at greater risk of HIV infection.

Female adolescents usually want to look good and attractive. Most often, parents will not buy some of the things the girls use for themselves and therefore engage in age disparate transactional sex to make themselves look good. The power differentials between the sexual partners in such relationships make it difficult for these young girls to negotiate for safer sex and in their desperation to earn money may still go ahead and have unprotected sex. Kalichman et al., (2007) explained that multiple and concurrent sexual partners are considered important factors in the rapid spread of HIV in Africa. Students who engage in sex for money are very susceptible to HIV due to less power to negotiate for safer sex.

5.5 Teacher-student sexual relationships

Barnett and Whiteside (2004) shows that students in the universities engage in sexual relationships with lecturers for grades to enable them graduate with good qualification. Similarly, Lee et al., (1996) cited by Timmeman (2003) explains that a survey conducted to in a USA secondary school revealed that in 2003, 20% of females students were sexually harassed by their teachers. This shows that both the teacher and student will engage in sexual relationships to benefit from each other. This makes it difficult to stop such a relationship. Findings from the study show all respondents agreed teacher-student relationship exists in TSHS except the assistant headmistress who neither denied nor accepted emphatically. 11 respondents from the questionnaire attest to having proposals from teachers. Majority of who come from the rich communities. This contends with Arowojolu (2002) study on sexuality, contraceptive choice and AIDS awareness which indicated females are more likely than males to have sexual relationships with older partners for monetary gains, maturity understanding by older partners and security. This also confirms the majority choice of the FGD respondents to go for rich old men and not young guys for financial help and security. Students in TSHS enter into relationship for marks, question papers, money, provisions, love and pleasure. In TSHS, the National Service Personnel young bachelors posted to the school are the ones mostly involved in this practice. Unfortunately, these teachers leave after one year and by that time they might have had sex with many of these students as well as females outside the school putting all the actors in the sexual activities at risk of HIV infection. Similarly, these females might also have multiple sex partners thereby complicating the issue and raising those involved susceptibility to HIV.

5.6 Pregnancy of female students

Rikka and Kontala (1999) found out young people regardless of their good knowledge; underestimate their own risks of becoming infected with HIV. While majority of the respondents know condom use can prevent HIV, some of these students do not use condoms when engaging in sex. 72% of the respondents of the questionnaire mention condom use as one means of the preventing HIV infection. Almost, all the FGD respondents mentioned condom use as one means of HIV prevention. 14% of these same respondents specified to use pills if their sexual partners do not like to use condom. This shows that even though students knew condoms can be used to prevent HIV, most of them rather use them to prevent pregnancy.

Therefore if their partners do not like to use condom they will use pills to prevent pregnancy putting themselves at risk of HIV infection. The findings of the study show that about 5 cases of pregnancy was recorded only this year by TSHS management. Responses from the FGD show that there have been many cases of pregnancy meaning that some female students engage in sex without protecting themselves from HIV. Some students believe the use of condom does not provide satisfaction when having sex and therefore forego prevention for satisfaction. This stance by these students contends what Maharaj (2006) statement that beliefs about condom are both positive and negative and influence the likelihood of its use. He highlighted the positive aspects that influence use to be prevention of pregnancy and the negative relates to cultural beliefs. However, if students continue to engage in sex for one reason or the other without protecting themselves, they put themselves at greater risk of HIV infection.

5.7 Students' knowledge on HIV/AIDS

Majority (72%) of the respondents in the study from both the questionnaire and FGD answered correctly for most of the questions on HIV/AIDS. However, some contributions were given which were misconceptions that they have. For instance, deep kissing was given by some

respondents to be a means of transmitting HIV. Persistent diarrhoea, syphilis and swelling all over the body are symptoms of HIV/AIDS according to some respondents. From Helena (2005) study in socio-cultural factors contributing to the spread of HIV/AIDS, she discovered that 5% of the respondents believed they can get AIDS through kissing and 23% of the respondents believed they can also get AIDS through mosquito bites. This confirms the responses the respondents gave. Although, they have some knowledge about HIV/AIDS, students also harbor some misconceptions which can mislead them to be susceptible to HIV with some of their actions. Killer (2002) argues that even though most young people allege that they know something about HIV/AIDS, many show ignorance in ways that could be lethal to them. Having some knowledge about HIV/AIDS is not a reason to be or not to be susceptible to HIV but how you apply this knowledge to avoid risky situations determines your susceptibility to HIV. Therefore, if students do not use this knowledge efficiently and effectively to avoid risky situations, they will be greatly susceptible to HIV

5.8 Inflow of money and the impact on cost of living in Sekondi-Takoradi

The rapid growth of a place brings in a lot of changes in the socio-cultural makeup of the place. The rapid economic growth of Sekondi-Takoradi due to the inflow of oil money has brought both positive and negative changes. A few wealthy people who can afford have invested into this industry and the majority is also struggling to make ends meet. The inflow of oil money into the city has resulted into rising prices of goods and services for those that can afford to patronize. The most significant impact of this rise in prices is that of rent for accommodation. The local population is being pushed to the outskirts of the city because they cannot afford to pay the high rent. Other landlords are evicting their tenants to remodel the buildings into offices for the oil companies. A situation like this creates a risky environment for the adolescent female who may find herself confronted with this situation due her parents' poverty.

Cohen (2005) discovered in the study on poverty and HIV/AIDS in sub-Saharan Africa that the socio-economic elements like poverty creates risky situation for people which sometimes drive them into seeking remuneration for sex. In this study finding, all the FGD respondents agreed that the oil money had negatively impacted on their lives. Money their parents give them now has reduced and cannot buy many things now with that money. At the same instance, majority of these respondents specified to go for rich old men and not young men without money. With these accessions, the research sees a great risk for these students to engage in sexual activities if confronted with this predicament. A study by Wamoyi et al., (2010) in Tanzania on young people between the ages of 14 to 24 years and their parents showed that parent-child relationships especially in poor households are impacted when the socio-economic environment of a place changes.

The parental behavioural control over their adolescent children and its influence on their sexual behaviour wane as a result of these socioeconomic changes in the society. Adolescents fend for themselves by engaging in sexual activities and parents could not about their behaviours because they provide for them too. Similarly, if these students start to provide for their families, the parents will overlook the risks their children find themselves and enjoy what they bring. Parents may even encourage their daughters to go out with these foreign oil workers for more money. The girls will have multiple sexual partners to earn more and at the same time putting themselves at great risk of been susceptible to HIV.

Chapter 6 Conclusion and Recommendations

6.1 Conclusion

The preceding chapters are summarized and given appropriate conclusion on different issues here. For the purpose of this study, a literature review was initially done and the factors which influence the TSHS female student's susceptibility to HIV were explored and described. The secondary school female student has many challenges from the socio-economic factors in her home and community, school learning environment and the general environment of Sekondi-Takoradi confronting her every day of her life to deal with. Unfortunately, it seems that the female secondary school student does not see her risk of getting infected with HIV. She underrates the risks and behaves as the world was not without HIV/AIDS to put a check on her. This study was conducted to understand the factors that make the female secondary school student susceptible to HIV with focus on the TSHS female student. To achieve this, many hypotheses were made as factors of that influence the susceptibility of the TSHS female student to HIV. These factors were the socioeconomic, school learning environment and the environment of Sekondi-Takoradi.

In the socioeconomic factors pertaining in the home and community of the female student, it was difficult to conclusively say there is poverty pertaining in the households of the respondents. However, the sacking of students for nonpayment of schools fees suggests that some households have some financial problems. It was however difficult to establish which community areas were these students coming from since the bursar of TSHS was not around to help with the statistics. Adolescents are very sensitive, especially the females and therefore will not like to be humiliated with the sacking from school. They might be tempted to find means to pay their fees if their parents cannot do it. This makes them very vulnerable to engage in risky behaviours. When this happens they will become greatly susceptible to HIV

It is well refreshing to note that many girls have easy access to education than boys from the study. This indicates that the culture where girls were regarded as sources of money is gradually eroding away and both boys and girls have equal access to education. When a girl is educated a whole society is educated. Educated females help greatly to build better societies. This indicates decreasing gender inequality in the household.

However, the sexual harassment that most of the students face creates risky situations for them to be susceptible to HIV. It is a serious issue when relatives these students know and trust are involved in perpetuating these crimes against them. Most often these girls fall victims when they depend on these relatives for help. Through coercion, they end up being sexually harassed.

The involvement of many girls from the rich communities in sexual activities makes it difficult to understand the motive behind that. From the findings these girls were been catered for by one or both parents and supported by relatives unlike those from the poor communities, but still engaged in risky sexual behaviours. This is a good research topic for further investigation to establish why they do it.

The impacts of peer pressure from the finding show that a lot of students are engaging in risky behaviours just to please the peer group members and for them to be accepted. To the extent

that peers select sexual partners for students and influence them to have sex puts these students engaged in this practice at risk of HIV infection. Furthermore, some students put themselves at risk of HIV infection to have sex for money to be able to dress like the other affluent members. The majority endorsement for old rich men as sexual partners by the FGD respondents to finance them greatly show that these students will overlook the risks involved in their sexual activities so long as they get what they want. They will risk HIV for money.

The school learning environment shows a picture which needs to be given much attention since most of the parties involved will like to the practice to continue. Teacher-student sexual relationship is not only morally wrong but also ethically evil. Students engaging in this act never become serious and may continue appeasing people with their bodies to achieve what they want. Most often they deprive the right people for things that they use their bodies to get. As they do this, they put a lot of people including themselves at risk of HIV infection.

The number of pregnancy cases recorded in TSHS show that despite the students having some knowledge on HIV/AIDS, their ability to use this knowledge in risky situations is poor. Being pregnant shows they have been engaging in unprotected sex putting them at risk of HIV infection. It is therefore important to use the knowledge you have and not acquire knowledge and not using it.

The general environment of Sekondi-Takoradi has seen changes both positive and negative. The influx of oil workers and foreigners to Sekondi-Takoradi had brought in a lot of money and the same hardships to the majority of the populace. Prices of goods and services have risen. One important thing the desk study showed was the mentioning of high rent rates on every site with oil production in Ghana. Many people have been compelled to take up risky livelihood strategies to be able to stay in Takoradi. This makes many people to be more susceptible to HIV in their quest for survival.

6.2 Recommendations

From the conclusions above, the following recommendations are made:

Negative peer pressure fuels HIV infection, but positive peer pressure can help to control HIV infection. Peer counsellors and peer solidarity groups should be formed to and encouraged to help reduce the epidemic.

The management of TSHS should sign undertaking with the National Service Personnel sent to the school and the teachers with the punitive measures clearly stated to prevent teacher-student sexual relation. Similarly, the fresh students been admitted should also be made to sign this undertaking.

The Guidance and Counselling Unit of TSHS should be resourced and trained to deliver HIV/AIDS education to students on regular basis to create awareness.

TSHS should collaborate with collaborate with some health institutions to sometimes organise VCT for both staff and students

TSHS should make HIV/AIDS topics a priority their curriculum to help educate students on the epidemic

The set of factors focused on in this research study are socio-economic, cultural and educational on the individual, school and society levels which create unfavourable conditions for the students to cope to the situations they find themselves. These factors rather create

favourable conditions for HIV infection as students take risks and engage in risky behaviours that expose them more to the virus.

Furthermore, the absence of co-curriculum activities in the school also makes the school learning environment to be boring and students will find alternative ways of entertaining themselves which can also create risky situations for these female students. such as unprotected sex, peer pressure influence, low knowledge of HIV/AIDS, living with male students in unsafe hostels, etc.

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ANNEXES

Annex 1 Questionnaire

This questionnaire is to help understand the factors that are likely to make the secondary school female student susceptible to HIV in Sekondi-Takoradi so as to come up with ways to build their resistance to the risks. In view of this, your honest and sincere responses are crucial to the results of this research. Please be assured that whatever information you provide will be strictly confidential and no one will know of it in the school. Please, kindly feel free to respond sincerely to the questions.

Your responses will not be identified with you personally, nor will anyone be able to determine who you are. Nothing you say on the questionnaire will in any way influence your present or future stay at Takoradi Senior High School.

General Information

- 1 In which Grade (Form) were you last term?
- 2 How old are you?
- 3 In which community area do you live? (e.g. Anaji-Takoradi, etc.)
.....

Survey questions

- 3 How many siblings are you living with in the house? Specify
- 5 How many of you are of school going age? Specify
(a) Males (b) Females
- 6 How many of you are attending school? Specify
(a) Males (b) Females

Use the following options to answer question 7 (i) to (v)

- Father
- Mother
- Both Parents
- Other relatives
- Other (specify)

- 7 (i) Who pays for your school fees?
- (ii) Who gives money to provide food for the family?
- (iii) Who buys your clothing?
- (iv) Who pays for the house you live in?
- (v) Who pays for your medical bills / health insurance?

In the following questions, the word “Care taker” is used to represent the persons (options) indicated in question 7.

- 8 What work does your care taker(s) do to earn income to provide for you?
 Works with the government
 Has his/her work
 Works with a private company
 Other (specify)
- 9 Do you work for your care taker(s) to support financially? Yes No
 If yes, state:
 (i) What work you do?
 (ii) At what time of the day do you work?
- 10 Do men disturb you with love proposals during your work? Yes No
 If yes, how frequent do they do this?
 Always Often
 Seldom Other (specify)
- 11 What would you do to pay your school fees to prevent you from been sacked from school if your care taker (s) is not paying it on time?
 Have sugar daddies Start a small business
 Work in a super market Take a boyfriend
 Other (specify)
- 12 If you do not get enough food and clothing from your care taker (s), what would you do supplement yourself?
 Have sugar daddies Start a small business
 Work in a super market Take a boyfriend
 Other (specify)
- 14 If your pocket money is not sufficient to support at school, what would you do supplement it?
 Have sugar daddies Start a small business
 Work in a super market Take a boyfriend
 Other (specify)
- 15 Would you have sex for money if the opportunity comes for you to earn a huge amount?
 Yes No
 Say, why
- 16 Have you ever been offered money by a male to have a sexual relationship?
 Yes No
 If, yes what did you do?
- 17 Have ever been forced to have sex against your wish? Yes No
 If yes, how frequent?
 Always Often

- Seldom Other (specify)
- 18 Has a close relation of yours (e.g. friend, relative, etc.) ever sexually harassed you?
 Yes No
 If yes, how frequent?
 Always Often
 Seldom Other (specify)
- 20 Have you ever been treated violently by a man for refusing:
 (a) to have sex? Yes No
 (b) his love proposal Yes No
- 21 What would you do if your sexual partner refuses to use condom for sex?
 Will go ahead and have sex Will refuse him sex
 Will use pills
 Other (specify)
- 22 Has a male teacher proposed love to you before? Yes No
 If yes, what did you do?
- 23 What would you do if a male teacher you like and respect proposes love to you?
 Accept Reject
 Do not know Other (specify)
- 24 What would make you to have sex with a male teacher?
 For marks For fear of victimization
 For money Other (specify)
- 25 Have you had problems with a teacher for rejecting his love proposal?
 Yes No
- 26 Do you know of any female student who has sexual relationship with a male teacher?
 Yes No
 If yes, for what benefit?
- 27 Have your friends ever influenced you into having sex? Yes No
 If yes, how frequent do they influence you?
 Always Often Seldom
 Other (specify)
- 28 Do your friends help you in getting sexual partners? Yes No
 If yes, how frequent?
 Always Often Seldom
 Other (specify)

- 29 How frequent do you do drink alcohol with your friends?
 Always Often Seldom
 Other (specify)
- 30 Have you ever had sex under the influence of alcohol? Yes No
 If yes, how frequent?
 Always Often Seldom
 Other (specify)
- 31 Do your friends encourage you to smoke? Yes No
 If yes, how frequent?
- 32 Do you know of any means that one can prevent him/herself from HIV infection?
 Yes No
 If yes, give two means you know
- 33 What is the main means of transmitting HIV in Ghana?
 Specify
- 34 Which of the following ways cannot transmit HIV?
 (i) Eating with an infected person from the same bowl.
 (ii) Having sex with an infected person.
 (iii) Using the same toilet facilities with an infected person.
 (iv) Kissing with a sore in your mouth with an infected person.
 (v) Shaking the hands of an infected person.

Annex 2 Focus Group Discussion

Focus Group Discussion (FGD)

NB: Please, this Focus Group Discussion (FGD) should be a discussion exercise. The guiding questions should just help you to ask questions to initiate discussions to come out with the students' views on these topics. Please, probe further for more information about the topics during the discussions. Please, record their responses they give indicating the form and place of residence of the student. Please, if you can get a device that can record the discussion for cross check of the writing of their responses, it will be very much appreciated.

Topics for FGD

- Students' knowledge on HIV
- Students' engagement in sexual relationships for money
- Students' knowledge about colleagues engaged in sexual relationships with older men and teachers
- Students' knowledge of colleagues being pregnant
- Co-curriculum activities for students
- Methods of teaching
- Oil industry on students' lives

Guiding questions

- 1 How can people be infected with HIV?
- 2 What disease does it cause?
- 3 What symptoms can you use to determine if someone is suffering from AIDS?
- 4 How can this disease be cured?
- 5 If no cure, how can you protect yourself from contracting it?
- 6 Do you think HIV/AIDS is a serious problem in Sekondi-Takoradi?
- 7 Is HIV/AIDS increasing or decreasing in Sekondi-Takoradi?
- 8 Do you know of someone who has this disease?
- 9 How did they acquire it?
- 10 Do you know of any female colleagues who engage in sexual activities for money?
- 11 Why do think they are doing that?
- 12 How many of you will engage in sexual activities for money if your parents cannot provide for you?
- 13 Which would you prefer, older rich men or young guys?
- 14 Why would you prefer older rich men or young guys?
- 15 Are you aware of student-teacher sexual relationships going on at TSHS?
- 16 Do you know of any colleagues engaging in sexual relationships with teachers?
- 17 For what benefits are they doing this?
- 18 Does any of you also have plans of doing this?
- 19 Have some female students been ever pregnant since you came to TSHS?
- 20 Can you recall the number of pregnant students you are aware of?
- 21 How many teachers do you know were responsible?
- 22 Do you think student-teacher of relationship is increasing or decreasing? Why do you say so?
- 23 Did any of these students complete her education?
- 24 Do you think these girls are at higher risks of being infected with HIV? Why? Give some reasons.
- 25 What do think about the methods of that teachers use at TSHS for teaching?
- 26 Why do think students always leave school before closing?
- 27 What are some the co-curriculum activities that you undertake in school?
- 28 If you are grade supervision of students by teachers at TSHS between 1 to 10, what grade will you give it? Why?
- 29 Western Region is now producing oil commercially, what do you think is the impact on cost of living in Sekondi-Takoradi?
- 30 How has this influence your lives in Sekondi-Takoradi?
- 31 What are your reasons for saying so?
- 32 What do you think about the influence of the oil production on students' risk of being infected with HIV? What are your reasons?

Annex 3 Key Informant Questions

Topics for key informants

- Number of female students
- Number of reported cases of pregnant students

- Perception about student-teacher sexual relationships
- Methods of teaching and assessment
- Co-curriculum activities
- Structure of school curriculum
- School fees and bursaries
- Supervision of students
- Amount of school fees of students
- Perception about students' sexual activeness and susceptibility to HIV

Guiding questions for key informants

- 1 How many female students do you have at TSHS?
- 2 How many female students are in SHS1, SHS2 and SHS3?
- 3 How much is the school fees for SHS1, SHS2 and SHS3?
- 4 How do the delay payments of school fees and bursaries affect the female student's learning?
- 5 What provision does the school has for poor parents to be able to pay their wards' school fees to prevent the sending off of their wards from school?
- 6 Do you think the sending off of students for non-payment of school fees by their parents puts the female students at risk of engaging in sexual activities to fend for themselves?
- 7 Do you think students leaving school before closing can be engaging in sexual activities that put them at risk of HIV infection?
- 8 What provision does the school curriculum has for the teaching and learning of HIV/AIDS to educate and create awareness for students?
- 9 Do you have training sessions on HIV/AIDS for students and teachers?
- 10 Do TSHS collaborate with health institutions to provide VCT for students to know their HIV status?
- 11 What can you say about the perception of TSHS female students being very sexually active and engage in sexual activities for money?
- 12 Due to this perception, do you think TSHS female students are highly susceptible to HIV especially now where there is influx of oil workers and foreigners into Sekondi-Takoradi?
- 13 What are the reported cases of students being pregnant?
- 14 Did any of these students complete her education?
- 15 Is there any opportunity for such students to come back after delivery to complete their education?
- 16 Were there any teachers responsible for any of these pregnancies?
- 17 What can you say about the perception of student-teacher sexual relationships at TSHS?
- 18 If this is going on, do you think it is in the increase or in the decrease?
- 19 Do you think the teachers' methods of teaching and assessment create grounds for student-teacher sexual relationships?
- 20 What do you think about the influence of the methods of teaching and assessment on students leaving school before school closes?
- 21 What measures are in place to reduce these actions of students?
- 22 What can you say about supervision of students at TSHS?

