

APPLICATION OF HIV/AIDS KNOWLEDGE AMONG SENIOR HIGH SCHOOL STUDENTS IN THE LOWER MANYA KROBO MUNICIPALITY: WHAT FACTORS INHIBIT THE PROCESS?

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ABSTRACT

Plethora empirical evidences suggest that most, school going age students have the difficulty of applying their knowledge gain in HIV/AIDS in order not become victims. This urged and motivated the researcher to find out the application of HIV/AIDS Knowledge Among Senior High School Students in the Lower Manya Krobo Municipality. To get respondents for the study, simple sampling technique was adopted to select 300 students, comprising 120 boys and 180 girls proportionately selected from the four Senior High Schools in the Municipality. A-37 item questionnaire adapted from Wanjiru Helen Wairimu was used for the data collection. The obtained data were analysed using descriptive statistics (means, standard deviations, frequencies, and percentages). The study revealed that the students in the LMKM are not applying their knowledge in HIV/AIDS due to certain inhibiting factors such as religion, limited recognition of personal risk of HIV infection, biological condition, and the pandemic being a curse from the gods are the factors that inhibit the application of HIV/AIDS knowledge of the SHS students in LMKM of the Eastern Region. medical health practitioners, clinical health psychologists and HIV/AIDS counsellors should provide more counselling services to students on HIV/AIDS to disabuse their perception that they are not at risk of contracting the virus

Keywords: HIV/AIDS, Knowledge, Senior High School, Students, Lower Manya Krobo Municipality

1.0 INTRODUCTION

The 2018 national estimates and projections of HIV/AIDS show an increase in the prevalence rate for the country. The adult HIV/AIDS prevalence rate was 1.69%. While the Ahafo Region had the highest rate at 2.66%, the North-East had the lowest prevalence rate at 0.39%. Among the districts, LMKM in the Eastern Region had the highest rate of 5.6%. It is also estimated that 334,713 people are currently living with HIV; 117,199(35%) men and 217,514 (65%) women. Again, in 2018, an estimated 19,931 people were infected with the virus. Of these, 5,532 (28%) were between the ages of 15 and 24 (National AIDS Control Programme, 2019). It should be acknowledged that, studies have been conducted on knowledge of students on HIV/AIDS from international and local perspectives. For example, in South Delhi, India, McManus and Dhar (2008) reported using a sample of 251 adolescent girls that when we talk about protection against sexually transmitted infections, including

HIV/AIDS, "use of protection" may have a different meaning for some sexually active adolescents. The authors further indicated that the adolescent may choose pill over condom, thinking that the former could protect them from HIV. The authors concluded that the girls did not know whether the contraceptive pill could protect them from HIV/AIDS or not.

Also, in Nairobi, Mayosiet al. (2012) reported from a sample of 3,612 adolescents aged 12 to 25 years that knowledge of the adolescents about prevention of transmission of HIV/AIDS was high, but was not applied to their sexual behaviour practices, although a small number of them transferred this knowledge. Again, the authors reported that one-fifth of sexually active boys used condoms regularly; one-third used them irregularly, while others did not see the need for condom use. It was therefore concluded that there was a need for comprehensive sexuality education programmes, which should aim to equip adolescents with the knowledge necessary to enable them to protect themselves from the scourge of HIV/AIDS.

Again, in Kenya, Njogu and Martin (2003) concluded from a study, that adolescents who are at the most reproductive stage of their human development are at greater risk of HIV/AIDS than any other population group. In this study, the authors indicated that the level of knowledge of students on HIV/AIDS was low. For this reason and more, the authors concluded that students deserve greater attention in the fight against HIV/AIDS infection and transmission. Arguably, research findings such as the aforementioned on the current study variables are contradictory and inconsistent, which demands further investigations. In Ghana, Oppong and Oti-Boadi (2013) reported from a study that sought to test the knowledge of HIV/AIDS among undergraduate university students, that the students' level of knowledge about HIV/AIDS was high, although there was no transfer of learning regarding their sexual practices. Appiah-Agyekum and Suapim (2013) concluded from a sample of 260 female students in senior high schools that, when adolescents receive HIV/AIDS education, they benefit from it because they become aware of the factors that predispose them to the disease.

Given the challenge that HIV/AIDS poses to adolescents, it is essential to intensify the awareness about the risks associated with sexual behaviour and the importance of applying this knowledge to real-life experience (Njogu & Martin, 2003). Kabiru and Orpinas (2009) support this assertion and argue that, given the high rate of HIV in Sub-Saharan Africa, it is important understand the forces that influence adolescent sexual behaviour because knowledge of HIV/AIDS is insufficient among Senior High School students in Ghana (Gordon & Inusah (2003; Tagoe & Aggor, 2009). There is a geographical gap in the study of HIV/AIDS in Ghana because the studies so far conducted in Ghana were limited to universities and senior high schools in regions other than the Eastern Region of in Ghana. Hence, the current study sought to assess the knowledge of senior high school students on HIV/AIDS in the Lower Manya Krobo Municipality of the Eastern Region of Ghana.

The LMKM has always had a high infection rate compared to other districts in the country. For example, out of the 254 districts in Ghana, LMKM led the country in 2018 with an infection rate of 5.6% compared to a national average of 2.66% (Ghana AIDS Commission, 2019). The Municipal Health Directorate's statistics on the infection rate from 2012 to 2019, collected from the municipality's health facilities, are quite scary. Statistics indicating the rate of Infections of HIV in the LMKM for persons, age between 10 years to 29 years is shown in Figure 2.1 and Table 2.1. Figure 2.1 and Table 2.1 both show that for 2012 to 2019 though

both males and females have experienced swings in HIV/AIDS infections female persons in the Municipality have been more affected over the eight-year period of observation. In 2013, 713 male persons were infected. Beyond that the number of infected male persons have been on the decline. Also, though both sexes have experienced a decline in the number of persons infected, it is observed the infection rate has been higher for females.

Table 1: Statistics indicating the rate of infections of HIV in the LMKM

YEAR	Male	Female
2012	43	166
2013	743	61
2014	43	159
2015	50	167
2016	24	144
2017	37	153
2018	52	182
2019	60	159

Source: LMKM Health Directorate (2020)

Factors that Inhibit the Application of HIV/AIDS Knowledge of Adolescents

Young people's egocentricity, belief in their invincibility, the need to express themselves and to seek sensations, which peaks in late adolescence and early twenties, make young people inclined to engage in risky physical and social behaviours (Plattner, 2010). These behaviours are often part of the transition from childhood to adulthood, which is characterized by the learning of self-awareness, while there is generally a lack of information, willingness, and skills that would enable young people to avoid high-risk behaviours (Odu et al., 2008). Various factors make young people particularly vulnerable to HIV infection. Some of these are discussed below:

In studies conducted in nine African countries among sexually experienced adolescent girls and boys aged 15 to 19, between 40 and 87 per cent of respondents in seven countries believed that they were at little or no risk of contracting HIV/AIDS. In most cases, having only one partner is thought to be safe because of knowledge of other risk factors such as sexual history and partners with other sexual partners (Reif, Geonnotti & Whetten, 2006).

Women are more vulnerable to HIV/AIDS because of their biological condition as receptive partners. Women's biological characteristics, which consist of a larger soft body surface area exposed during sexual intercourse, allow for greater exposure of mucous membranes to seminal fluids. In addition, male seminal fluid contains a higher concentration of HIV than vaginal fluid and remains in the vaginal canal for a relatively long period of time. Tuju (1996) pointed out that men transmit HIV more efficiently to women than women to men. Other biological factors include mother-to-child transmission of HIV during pregnancy, birth or after birth through breastfeeding.

During adolescence, sexuality becomes the biggest factor in the process of body and mind development. Human sexuality, and young people's sexuality in particular, involves

inevitable and irresistible biological impulses that always demand to be satisfied. For young people, the onset of menstruation and sperm development often marks the initiation of sexual activity, in an attempt to satisfy newly discovered sexual urges and curiosity (Moletsane et al., 2007).

Early initiation of sexual activity puts the adolescent at health risk. Young people are less likely to require a commitment with or from a partner before having sex. As a result, young people report having frequent sexual intercourse with casual contact, meaning that they often have multiple relationships. They frequently change partners and are therefore at high risk of HIV infection (Kiragu et al., 1996).

Reproductive health services have been largely oriented towards the needs of pregnant married women. As a result, young people, especially sexually active youth, do not seek these services for reasons such as inconvenient hours and locations, lack of privacy and confidentiality, fear of social stigmatization, judgmental attitudes of service providers and unaffordable fees. Lack of access to health services becomes a serious threat to young people's reproductive health (Caldwell et al., 2004)

Many young people cite lack of knowledge, inaccessibility and safety issues as the main reasons for not using contraceptives. One study showed that less than 50% of young people in Madagascar and Nigeria are aware of contraception (Caldwell et al. 2004). In Sub-Saharan Africa, as in other parts of the world, a culture of silence surrounds most reproductive health issues. Many adults are uncomfortable talking about sexuality with their children. Others lack specific knowledge about sexual health.

Many Africans feel unable to discuss sexuality despite perceived barriers related to gender and age differences. In many African countries, some people believe that men are biologically programmed to need sex with more than one woman. Polygamy is a central social institution and reinforces this belief. In addition, some men believe that this "biologically programmed need" makes high-risk sex unavoidable (Buckley & Ribstein, 2001). In some poor communities, high rates of HIV infection may be partly explained by early, consensual or forced sexual initiation (UNAIDS & WHO, 2002).

Young people who are socially and economically disadvantaged are most at risk of HIV infection. Lack of education, untreated STIs and sexual exploitation exacerbate the vulnerabilities of young people living in poverty. Some African religions and traditions teach that AIDS is a shameful disease and a punishment for those who have had sex, and many adults are reluctant to admit to a disease that involves promiscuity (Buckley, 2001).

Around the world, young people have high rates of tobacco, alcohol and other hard drug abuse. This is often accompanied by early sexual experiences among young people, which increases the risk of HIV infection (WHO, 2000). A person under the influence of drugs and alcohol loses their inhibitions and are more likely to engage in risky sexual behaviour. These behaviours include casual sex with multiple partners, sex without a condom, or incorrect condom use. Injecting drug use is "the most effective means of acquiring infection" using contaminated injection equipment and is emerging as a major vector of HIV transmission in Kenya (Muturi, 2005). Drinking alcohol before or during sex can contribute to risky sexual behaviour (NACC, 2012). In a 36-month study of agricultural workers in rural Kenya, study

participants who consumed alcohol during sex were 2.4 times more likely to be infected with HIV (Shaffer et al., 2010).

A study by Forsyth and Rau (1996) showed that the economic factor plays a major role in the spread and control of HIV/AIDS. For example, with the movement of large numbers of people involved in both the informal and formal sectors and including mobile work in the transport, entertainment, fishing and tourism industries, child migrant workers are particularly vulnerable to casual sexual relations, many of whom may be away from their regular partners for long periods of time (Wairimu & Theuri, 2014). The lack of employment for young men and women has led them to engage in sex work for money, putting them at risk of contracting HIV. In Kenya, homosexuality has developed and men in legal heterosexual unions tend to seek sex with male prostitutes, putting them at risk of contracting the disease and passing it on to their legal partners (Buckley & Ribstein, 2001).

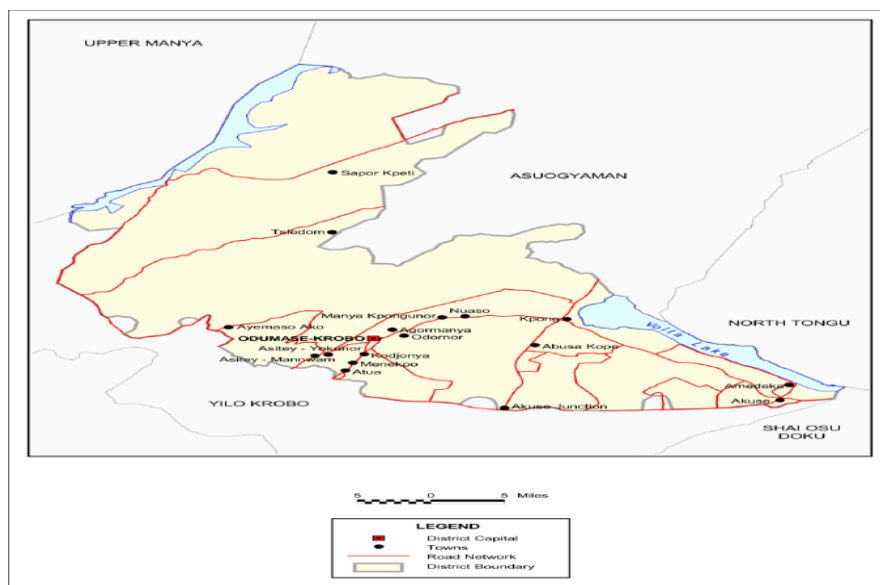
1.1 Research Questions

1. What factors inhibit the application of HIV/AIDS knowledge of SHS students in LMKM of the Eastern Region of Ghana?
2. What is the influence of HIV/AIDS knowledge on the sexual behaviour of the SHS students in the LMKM of the Eastern Region of Ghana?

2.0 METHODOLOGY

2.1 The setting of the Study

Lower Manya Krobo is one of the thirty-three (33) districts in the Eastern Region, located in the eastern part of the region along the south-western corner of the Volta River. It lies between latitudes 6.050S and 6.300N and longitudes 0.080E and 0.200W. It is bordered to the North-West by Upper Manya Krobo, to the North-East by Asuogyaman, to the South-East by North Tongu, to the South by Yilo Krobo and Shai Osudoku Districts respectively.



Adapted from Ghana Statistical Service district analytical report (2014)

Figure 1: Map of the Study Site

The Municipality covers an area of 1,476 square kilometers, constituting about 8.1% of the total land area within the region (18,310 km²). The major towns in the district include Odumase township (which incorporates Atua, Agormanya, and Nuaso), Akuse, and Kpong (Ghana Statistical Service, 2014). The total population for the municipality is 89,246 which accounted for 3.4% of the total population for the region. The male and female population is 41,470 and 47,776 respectively (Ghana Statistical Service, 2014). The economically active population (ages 15-64) constitutes 58.5% of the total population, resulting in an age dependency ratio of 1:07 (that is, one active person to 0.7 inactive people). This means that if the active population is effectively utilized for development, the resultant effect on poverty will be positive and could reduce vulnerability to HIV due to low income, especially for young girls. There are major and minor occupations in the Manya Krobo District. Farming, which employs more than half of the workforce, is a major occupation. Other major occupations include fishing and teaching. Laborers rank highest at 66.0% in the minor occupation, distilling/tapping, and others are included as economic activities in the area (Ghana Statistical Service, 2014).

3.0 RESEARCH DESIGN

The research design for this study was the descriptive design. To be specific, the cross-sectional design was employed in carrying out this study. Descriptive survey design involves the collection of data in order to test hypotheses or answer questions concerning the current status of the subject under investigation (Gay, 1992). A survey can examine current attitudes, opinions or practices. Attitudes, beliefs, and opinions are ways individuals think about issues, whereas practices are their actual behaviors (Creswell, 2012). This design was chosen because it offered the opportunity to assess the knowledge and describe the attitude towards the prevention methods of HIV and AIDS of SHS students in the Lower Manya Krobo Municipality of the Eastern Region of Ghana. Amedahe, (2002) maintains that in descriptive research, accurate description of the activities, objects, processes, and persons is the focus. This design has the advantage of measuring current attitudes or practices. It is also capable of receiving data in a short period of time (Creswell, 2012). However, the design has its own weaknesses as there is no manipulation of variables as in experimental designs (Shuttleworth, 2008). The cross-sectional survey design fits well with this study because it was suitable for obtaining data from a cross-section of SHS students from Lower Manya Krobo Municipality.

3.1 Population, Sample, Sampling Procedures

The target population for this study consisted of all the public Senior High Schools in Lower Manya Krobo Municipality in the Eastern Region of Ghana. According to the statistics from Lower Manya Krobo Municipal Education Office, there are four public SHSs in the municipality. The target population for this study was 2559 from three students in the four public SHSs in the municipality. Social scientists are never able to study the entire population; they depend on selected constituents to infer meanings into the larger population. These constituents are called samples (Babbie, 2010). Flick (2014) asserts that out of a research population, a sample is selected. Sample refers to any group or a sub-group of the

total population. A sample is defined by Flick (2014) as representative respondents selected from a research population. The number depended on the accuracy needed, population size, population heterogeneity, and resources available. According to Kothari (2004), a sample size of between 10% and 30% is a good representation of the target population for populations below 10,000. The sample size for this study was 300 students which represent 11.72% of the target population of form three students in the four public SHSs in the LMKM. The sample size was determined using Cochran's sample size formula.

$$n = (z^2 pq) / e^2$$

Where:

Z2 is the abscissa of the normal curve that cuts off an area at the tails (1 - equals the desired confidence level at 95%). The value for Z found in statistical tables the area under the normal curve is 1.96

p (0.5) is the estimated proportion of a characteristic that is present in the population,

q is 1-0.5 is the estimated proportion of a characteristic that is not present in the population,

e is the desired level of precision, in other words, it is the error level of that is like to be made in estimating the sample which is assumed to be 0.0032

Substituting the values into the formula produced a sample size of 300.125. For the purpose of simplicity, the calculated sample size which was assumed to be representative of the population was 300 SHSs students in LMKM.

Sampling is the procedure a researcher uses to select people, places, or things to study (Flick, 2014). The quality of a sample determines the quality of the research findings in large measure. It involved setting aside a unique subset of the population that has the characteristics of interest for the study. There are two ways of selecting a sample for the study. Both procedures were employed in this study. First, the researcher employed convenience sampling to select schools involved in the study. The condition for selecting the schools' regions included the fact that they were not only easily accessible to the researcher but also, offered the researcher ease of gathering data.

The simple probability sampling procedure was used to draw the sample of 300 respondents for the study. The sample was drawn in such a way that it was representative of the entire population. To draw a representative sample, the probability sampling procedure was adopted. Simple random sampling was used to select the respondents for the study. Using the lottery approach, the researcher designed ballot papers of the same quantity with the inscription "yes" or "no" and they were neatly folded and placed in a box. The pieces of paper were mixed and put into a box and they were drawn out of the box in a random manner by students. With this method, each member of the population was strategically selected to participate in the study. Persons who chose "yes" were given the questionnaire while those who chose "no" were not included in the sample.

4.0 QUESTIONNAIRE

A-37 item questionnaire which contains both closed-ended and open-ended questions was used as a data collection instrument. Babikir et al. (2012) explain a questionnaire as a set of written questions answered by a large number of people that is used to provide information. A questionnaire contains a series of questions, statements, or items that are presented and the respondent is asked to answer, respond to or comment on them in a way she or he thinks best. There is a clear structure, sequence, and focus, but the format is closed-ended, enabling the respondent to respond in her or his own terms (Cohen et al. 2000). The first section of the questionnaire sought demographic characteristics which included age, sex, religion, and religious denomination.

The questionnaire was used for this study because it is relatively quick and easy to create. With questionnaires, interpretation and analysis of data is easy as data entry and tabulation for nearly all surveys can be easily done with many computer software packages (Neuman, 2000). Again, questionnaires are familiar to many people, nearly every educated one has had some experience completing one and they do not make people apprehensive (Tuckman, 1992). Above all, the questionnaire is easy to standardize therefore reducing the amount of bias in the results as there is a uniform question presentation. Kerlinger (2000) observes that a questionnaire is widely used for data collection in educational research because it is developed to answer research questions. It is very effective for securing factual information about practices and conditions of which the respondents are presumed to be knowledgeable of. It is also used for inquiring into the opinions and attitudes of subjects (Neuman, 2000).

4.1 Data Analysis and Presentation

Yin (2003) states that before interpretation take place, data should be analyzed statistically and presented. Responses from respondents on the questionnaire were tallied in order to get the number of respondents who answered each set of items. The quantitative data were fed into the Statistical Product for Service Solutions (SPSS) version 25.0 software and they were analyzed. Frequency count, percentage distributions, means, and standard deviations of responses were generated according to each research question raised, and these were presented in tables.

4.2 Ethical Considerations

In conducting a study, Creswell (2008) advises researchers to seek and obtain permission from the authorities in charge of the site of the study because it involves prolonged and extensive data collection. For ethical reasons, a letter of introduction from the Head of Department of Social Studies Education of the University of Education, Winneba, was obtained to introduce the researcher during data collection. The administration of the questionnaire was done after consent was sought from the heads of the various SHSs in the Lower Manya Krobo Municipality. After permission was granted, the study participants were informed of the impending administration of the questionnaire and assured of the confidentiality of whatever information they provide. Shamoo and Resnik (2009) define ethics in research as the discipline that studies standards of conduct, such as philosophy, theology, law, psychology, or sociology. In other words, it is a method, procedure, or perspective for deciding how to act and for analyzing complex problems and issues. Protection of participants and their responses was ensured by obtaining informed consent,

protecting privacy, and ensuring confidentiality. In doing this, the description of the study, the purpose, and the possible benefits were communicated to participants. Participants were permitted to freely or voluntarily withdraw or leave at any time if they deemed it fit. As a way of preventing plagiarism, all ideas, writings, drawings, and other documents or intellectual property of other authors were referenced indicating the authors, title of publications, year, and publishers.

5.0 RESULTS

5.1 Bio-Data of the Respondents

This section on the questionnaire (Biographical) discusses the background information of the respondents (students). These include the respondents' age ranges, gender, religion and denomination. The demographic data were analyzed using graphs (bar chart and line graph).

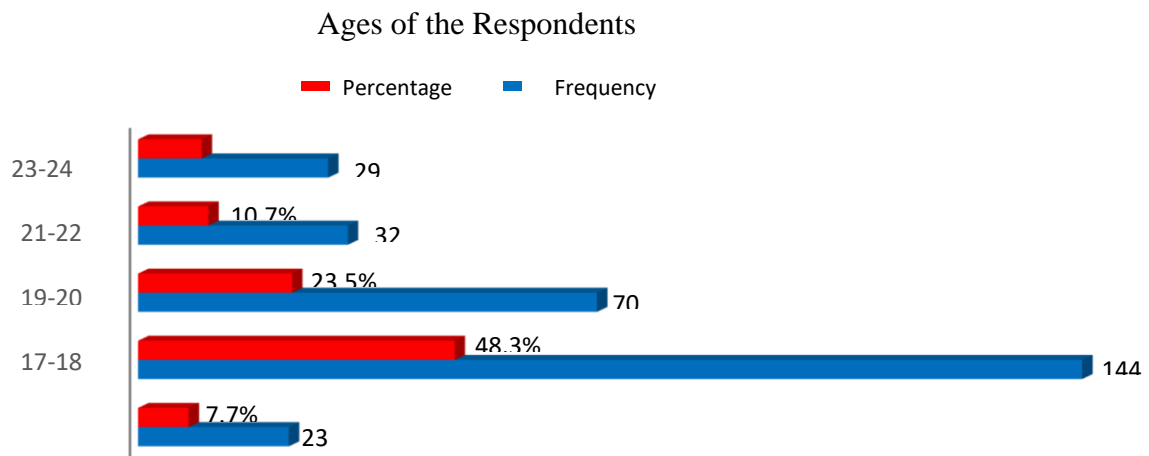


Figure 2: Ages of the students

Source: Field data (2020)

As shown in Figure 2 above, the results show that most third-year students in SHSs in the LMKM of the Eastern Region of Ghana ages fall within 17 and 18 (n=144, 48.3%). Those from 19 to 20 followed (n=70, 23.5%), those 23-24 (n=29, 9.7%). Those from 15 to 16 years were the least (n=23, 7.7%).

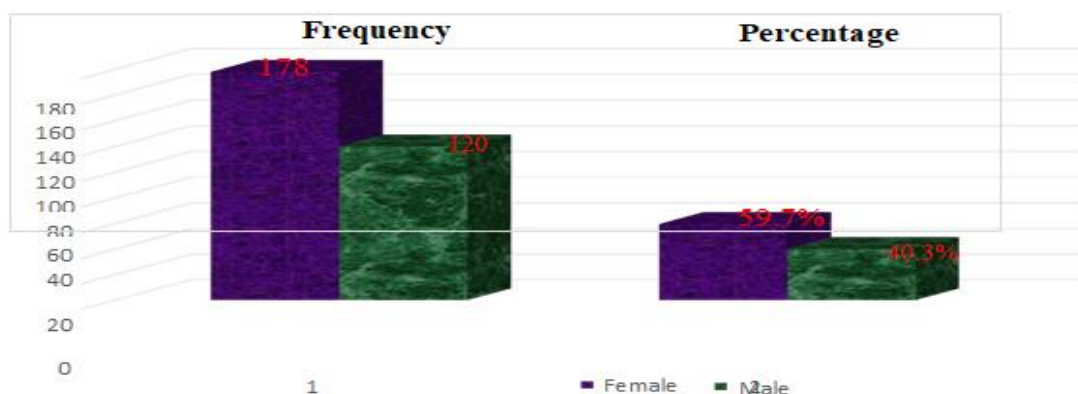


Figure 3: Gender of the students

Source: Field data (2020)

Figure 3 shows the gender of the students. As shown in the Figure above, the results show that majority of the SHS three students in the LMKM of Ghana were females (n=178, 59.7%) The males on the other hand were the least represented (n=120, 40.3%). This is because one out of the four schools, that is, Krobo Girls' Presbyterian SHS is an all-female school.

Table 1: Factors that inhibit the application of HIV/AIDS knowledge of SHS students

Statement	Strongly agree	Agree	Uncertain	Disagree	Strongly disagree
Religion	47(15.8)	107(35.8)	84(28.3)	40 (13.3)	20 (6.7)
Frequent change of partners	64(21.7)	93(31.7)	89 (30.0)	35 (11.7)	15 (5.0)
Exchange of sexual partners	73(24.5)	89(30.0)	99(33.3)	27 (9.2)	10 (3.3)
Peer pressure	7 (2.5)	20 (6.7)	67 (22.5)	109(36.7)	93(31.7)
Unprotected sex	57(19.2)	109(36.7)	82 (27.5)	37(12.5)	13 (4.2)
Difficulty in procuring condom	13 (4.2)	60(20.0)	99 (33.3)	80(26.7)	46(15.8)

Source: Field Survey, 2020

A number of factors that could inhibit the application of knowledge of HIV/AIDS prevention strategies have been examined from the perspective of the Senior High School students. The data explains that 107(35.8%) of the entire sample agreed to the statement that religion could influence Senior High School students' application of knowledge on HIV/AIDS, while 84(28.3%) of the sample were uncertain whether religion influenced one's application of knowledge acquired about HIV/AIDS. On the contrary, 40(13.3%) of the sample disagreed with the statement that religion influenced Senior High School students' application of HIV/AIDS knowledge. Many young people cited lack of knowledge, religious issues as the main reasons for not using contraceptives (for example the Catholics). One study showed that less than 50% of young people in Madagascar and Nigeria are aware of contraception (Caldwell et al. 2004). In Sub-Saharan Africa, as in other parts of the world, a culture of silence surrounds most reproductive health issues. Many adults are uncomfortable talking about sexuality with their children due to issues of religion. Others lack specific knowledge about sexual health. Polygamy is a central social institution and reinforces this belief (Buckley & Ribstein, 2001).

The next variable is whether students in the senior schools exchanged sexual partners. The data revealed that 93(31.7%) of the entire sample agreed while 89(30.0%) of the sample were uncertain about the statement. 35(11.7%) of the entire sample disagreed with the statement that students in the Senior High Schools exchanged sexual partners while 64(21.7%) of the entire sample strongly agreed with the item that students in the senior schools exchanged sexual partners. Though 99(33.3%) of the sample were uncertain that students in the senior schools exchanged sexual partners but an equally huge number of 89(30.0%) of the sample agreed that students in the senior schools exchanged sexual partners. Also, 73(24.5%) of the

entire sample strongly agreed that students in the Senior High Schools exchanged sexual partners. A small number of informants 27(9.2%) of the entire sample disagreed that students in the Senior High Schools exchanged sexual partners. Responses from these respondents buttress the findings of Odu et al. (2008) and Plattner, (2010) that the youth express themselves and seek sensations in late adolescence and early twenties. Surely, many of the students in Senior High Schools are in their late adolescence and early twenties hence exhibit these characteristics.

Another variable that was looked at was whether peer pressure influenced students' application of HIV/AIDS knowledge. From the study, 20(6.7%) of the sample agreed that peer pressure influenced students' application of HIV/AIDS knowledge while 27(22.5%) of the sample were uncertain whether peer pressure influenced students' application of HIV/AIDS knowledge. A huge number of 109(36.7%) of the entire sample disagreed with the statement that peer pressure influenced students' application of HIV/AIDS knowledge while 7(2.5%) of the entire sample strongly agreed that peer pressure influenced students' application of HIV/AIDS knowledge.

Besides, 109(36.7%) of the entire sample agreed that students in senior high schools engage in unprotected sex. while 82(27.5%) of the sample were uncertain whether students in Senior High Schools engage in unprotected sex 37(12.5%) of the sample disagreed that students in senior high schools engage in unprotected sex while a moderate number of 57(19.2%) of the sample strongly agreed that students in senior high schools engage in unprotected sex. This finding supports the idea that lack of education, untreated STIs and sexual exploitation exacerbate the vulnerabilities of young people (Buckley, 2001).

Finally, the difficulty to procure condoms was also examined. A massive number of 99(33.3%) of the entire sample were uncertain whether students in Senior High Schools had any difficulty in procuring condoms, 80(26.7%) of the sample disagreed that difficulty to procure condoms affected the application of the knowledge on HIV/AIDS. However, 60(20%) of the entire sample agreed that difficulty to procure condoms affected the application of the knowledge while 46(15.8%) of the entire sample strongly disagreed that difficulty to procure condoms affected the application of the knowledge.

Several other studies have observed high-risk sexual behaviors among young people in spite of their good knowledge and awareness of HIV/AIDS (Adedimeji, 2005; Afenyadu & Goparaju, 2003; Anderson & Beutel, 2004; Braithwaite & Thomas, 2001; Ikamba & Ouedraogo, 2003; Meekers, Klein & Foyet 2001; Odirile, 2000). A study among college students in the United States of America also found a mismatch between knowledge about sexual issues and sexual behavior (Castora, 2005). In studies conducted in nine African countries among sexually experienced adolescent girls and boys aged 15 to 19, between 40 to 87 percent of respondents in seven countries believed that the amount of HIV/AIDS programs are not enough to curb the menace (Reif et al. 2006). In Ghana, it has been observed that the expected behavioral changes have not occurred in spite of the several programs that have been undertaken to create awareness of the disease (Anarfi, 2005; Kates & Leggoe, 2005).

Research Question Two: What is the influence of HIV/AIDS knowledge on SHS students’ sexual behavior?

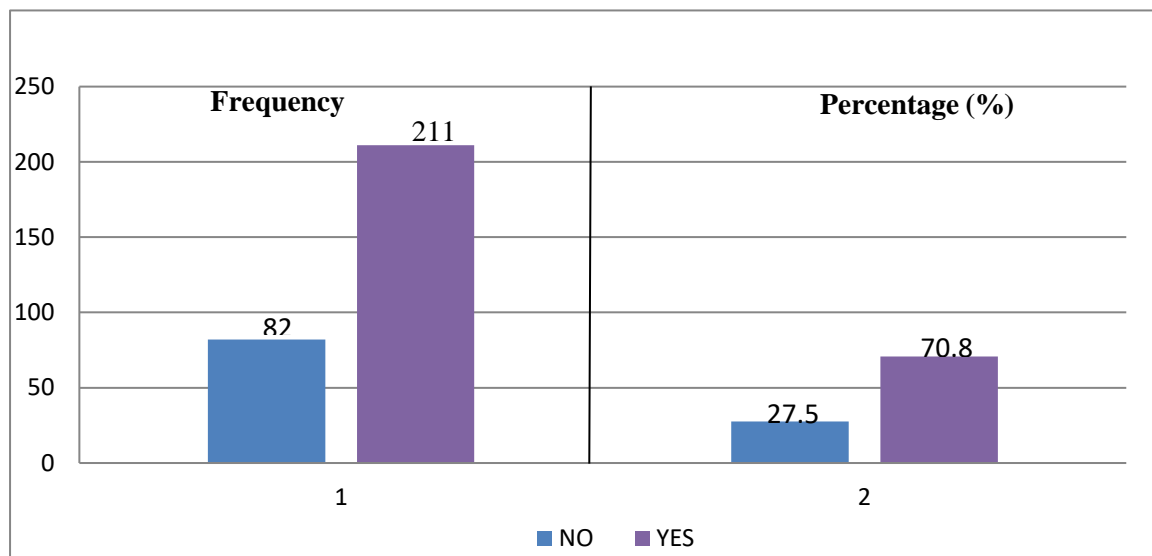
The thrust of this research question was to examine the influence of HIV/AIDS knowledge on SHS students’ sexual behavior.

Table 2: Results on whether the students have had sexual intercourse before

Response	Frequency	Percentage (%)
No	142	47.7
Yes	156	52.3
Total	298	100.0

Source: Field Data, 2020

The results in Table 2 show that most SHS students in the LMKM of Ghana have experienced Sex (n=156, 52.3%) while 142 of the SHS students in the LMKM of the Eastern Region of Ghana representing 47.7% said they have not had sex before.

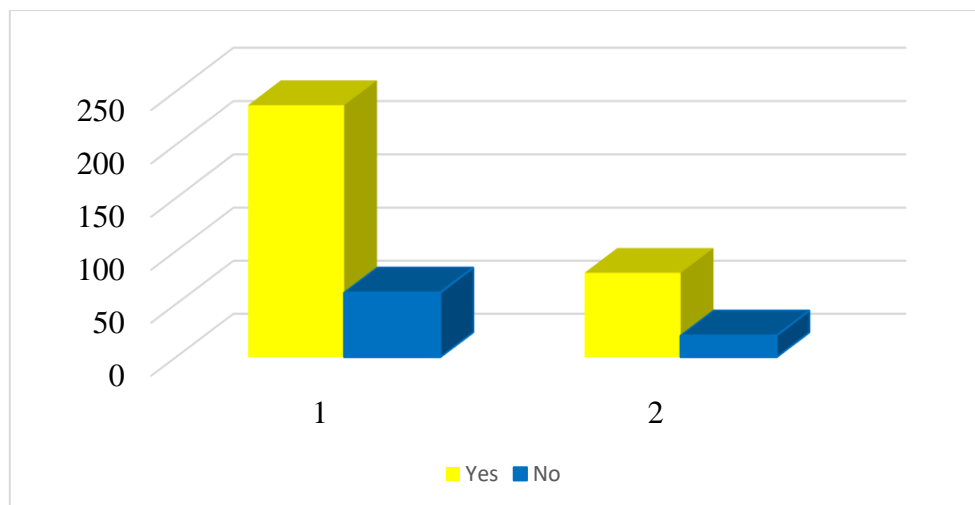


Source: Field Data, 2020

Figure 4: Use of free condoms

In relation to the students use of condom when they get them for free, the results indicated that most SHS students in the LMKM of Ghana will use condom when they get them for free (n=211, 70.8%) while 82 of the SHS students in the LMKM of the Eastern Region of Ghana representing 27.5% said they will not use condom even when they get them for free. Five (5) respondents representing 1.7% were, however, silent on the question.

Figure 5: Willingness to have an HIV test



Source: Field Data, 2020

6.0 DISCUSSION

In line with whether SHS students in the LMKM of Ghana would like to have an HIV test, a greater number of the respondents expressed their preparedness to have such a test, that is, (n=237) representing 79.5%. On the other hand, 61 of the SHS students representing 20.5% said they would not like to have an HIV test. Research results on the analysis of 250 North American programs established that among sexually active young people, AIDS education programs were effective in decreasing the number of sexual partners and increasing condom use (UNAIDS 2004). In Nigeria, a study among unmarried male youths in the University of Ibadan (Adewole & Lawoyin, 2004) found that students who had obtained knowledge on HIV/AIDS early at the secondary school level were less likely to have multiple sexual partners, compared with those who acquired the knowledge later.

In Ghana, knowledge about HIV/AIDS was found to be lower among students who around 2004 were having sexual partners (Apoya, Ayugane & Balhara, 2004). Using Demographic and Health Survey data from 23 low and middle-income countries, Snelling et al. (2007) also found an association between increased knowledge of HIV/AIDS and condom use. In a study among men in Bangladesh, respondents who had heard of AIDS were less likely to have had sex with prostitutes than those who had not (Caldwell & Indrani, 1999).

Anarfi and Appiah (2004) have emphasized that since there is yet no cure for HIV/AIDS, education then becomes the only social vaccination against the disease. Commenting on the kind of information that adolescents need, McIntyre (2004:12) has said: —All adolescents need information on how HIV spreads, how it can be prevented, and how you cannot tell when someone is infected. Monasch and Mahly (2006:25) concluded that -An important, but not sufficient, foundation for any prevention effort aimed at young people is to provide them with basic information on how to protect themselves and their partners from acquiring the virus. Other studies similarly report of the positive influence of knowledge of HIV/AIDS on sexual behaviour, including delaying sexual intercourse, using condoms, stopping sex with prostitutes, etc, (Camlin & Chimbwete, 2003).

In spite of these findings, generally, knowledge of HIV/AIDS is higher among young men than women (Aluede, Imhonde, Maliki & Alutu, 2005; UNAIDS, 2003). It is also higher among people in urban areas than rural areas (UNAIDS, 2005; UNAIDS, 2003). Others have also warned that knowledge about HIV/AIDS does not automatically lead to responsible sexual behavior (Adedimeji, 2005), and that knowledge must be complemented by attitudes and values that will lead to appropriate decisions (White, 2005).

Low levels of condom use in spite of awareness of the risks have also been reported (Karim, Lagnani, Morgen & Bond, 2003; Winfield & Whaley, 2002). In a study to test the usefulness of the Health Belief Model in predicting condom use among African American college students, Winfield and Whaley (2002) found that high levels of HIV/AIDS risk knowledge were not significantly correlated with condom use. In research in Cote d'Ivoire, researchers found that accuracy of knowledge about AIDS did not significantly predict condom use (Zellner, 2003). The Study buttresses Resenstock's (1974) HMB which asserts that for an individual to engage in healthy sexual behavior such as safe sex, an individual has to perceive himself as being susceptible to a health threat. The SHS students in the LMKM do, not themselves as being vulnerable to HIV, hence, they engage in risky sexual behaviors.

7.0 SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

The thrust of the study was to assess the HIV/AIDS knowledge of SHS students in the LMKM of the Eastern Region of Ghana. The results show most of the SHS students in the LMKM of the Eastern Region of Ghana get a lot of information from television. Specifically, the study sought to assess the knowledge level of SHS students in LMKM on HIV/AIDS, examine the influence of HIV/AIDS knowledge on SHS students sexual behavior and, finally, explore the factors that inhibit the application of HIV/AIDS knowledge of SHS students in LMKM of the Eastern Region. To materialize these purposes, the study was rooted and nested in the quantitative method. The simple random sampling technique was used to select the respondents for the study. In all, a total of 300 respondents comprising 120 boys and 180 girls answered the questionnaire of which 298 were returned for analysis. A 37-item questionnaire adapted from Wairimu Hellen Wanjiru was used for the data collection. Ethical consideration was also ensured before the actual data collection. The data collected was analyzed using descriptive statistics (means and standard deviations, frequencies, and percentages). The analyses were interpreted and discussed in line with the research questions.

In the main, it can be asserted that HIV/AIDS is recognized as a national priority health issue in Ghana. Consequently, the Ghana AIDS Commission and the National AIDS Control Programme were established, among other things, to enhance the knowledge and awareness on nature, causes, effects, and means of managing the spread of HIV/AIDS among populations at risk in Ghana. I, therefore, conclude that factors such as frequent change of partners, Exchange of sexual partners, Peer pressure, Unprotected sex, difficulty in procuring condoms inhibit the application of HIV/AIDS knowledge of SHS students.

Based on the findings obtained and the conclusions reached, the following recommendations are made. It is recommended that medical health practitioners, clinical health psychologists, and HIV/AIDS counselors should provide more counseling services to students on HIV/AIDS

to disabuse their perception that they are not at risk of contracting the virus. This would provide a better way of helping to reduce the risky sexual behaviors among then students. The students must be engaged actively in the campaigns aimed at reducing the rate of infections among themselves. The formation of HIV/AIDS clubs in schools can be of immense benefit towards bringing down the rate of infections in the municipality. Religious leaders must take active roles in the campaigns to reduce the rate of infections among the populace. They can help demystify the belief held by some students that HIV/AIDS is a curse from the gods.

The study finally recommended that the Ministry of Health in collaboration with other important educational agencies should intensify sex education to the students and the community members in order to strengthen their awareness of HIV/AIDS.

REFERENCES

- Adedimeji, A. A. (2005). *Beyond knowledge and behaviour change: The social-cultural context of HIV/AIDS risk perception and protective behaviour among young urban slum inhabitants in Nigeria*. Boston: Department of Population and International Health, Harvard School of Public Health.
- Adewole, D. A., & Lawoyin, T. O. (2004). *Knowledge, attitude to HIV/AIDS and sexual risk behaviour among unmarried male youths of the University of Ibadan, Nigeria*. International Conference on AIDS, Bangkok, July 11-16.
- Afenyadu, D. & Goparaju, L. (2003). *Adolescent sexual and reproductive health behaviour in Dodowa, Ghana*. Washington, DC: Centre for Development and Population Activities.
- Aluede, A., Imhonde, H. O., Maliki, A. E., & Alutu, A. N. G. (2005). Assessing Nigerian university students' knowledge about HIV/AIDS. *Journal of Social Science*, 11(3), 207-213.
- Anarfi, J. K. (2005). Under reaction to sexual behavioural change among the youth in Ghana in the Era of AIDS. In Agyei-Mensah, Casterline and Agyeman, (Eds.). *Reproductive change in Ghana: Recent patterns and future prospects* (pp. 225-242). Legon: Department of Georgraphy and Resource Development, University of Ghana,
- Anarfi, J. K., & Appiah, E. N. (2004). *Mitigating the Impact of HIV/AIDS in Ghana: The role of education*. Paper Presented at the International Conference on Ghana at Half Century. ISSER and Cornell University. M-Plaza Hotel, Accra, July 18-20.
- Anderson, K. G. & Beutel, A. N. (2004). *Self-perceived risk among youth in Cape Town, South Africa*. University of Oklahoma, presented at the Population Association of America Annual Meeting, Los Angeles, CA., April 2006.
- Apoya, P. A, Ayugane, T. N. & Balhara, S. (2004). *The Knowledge, Attitude, Economic and Personality (KAEP) framework: A new approach to designing HIV/AIDS Intervention*

Programmes. Paper Presented at the National HIV/AIDS Research Conference (NHARCON) held at La Palm Royal Beach Hotel, Accra, Ghana, February 11-13.

Appiah-Agyekum, N. N., & Suapim, R. H. (2013). Knowledge and awareness of HIV/AIDS among high school girls in Ghana. *HIV/AIDS (Auckland, NZ)*, 5, 137.

Babbie, E. (2010). *The basics of social research*. Athens: Thompson Wadsworth.

Babikir, A., Gupta, R., Mwabutwa, C., & Owusu-Sekyere, E. (2012). Structural breaks and GARCH models of stock return volatility: The case of South Africa. *Economic Modelling*, 29(6), 2435-2443.

Braithwaite, K., & Thomas, V. G. (2001). HIV/AIDS knowledge, attitudes, and risk behaviours among African-American and Caribbean College Women. *International Journal for the Advancement of Counselling*, 23, 115-129.

Buckley, F. H., & Ribstein, L. E. (2001). Calling a truce in the marriage wars. *University of Illinois Law Review*, 561.

Caldwell, B., & Indrani, P., (1999). Continued High-risk Behaviour Among Bangladeshi Males. In: Caldwell, J. C., Caldwell, P., Anarfi, J., Awusabo-Asare, K, Ntozi, J., Orubuloye,

I. O., Marck, J., Cosford, W., Colombo, R. and Hollings, E. (eds.), *Resistances to behavioural change to reduce HIV/AIDS Infection in Predominantly Heterosexual Epidemics in Third World Countries* (PP. 183-196). Canberra: Australian National University Press.

Camlin, C. S. & Chimbwete, C. E. (2003). Does knowing someone with AIDS affect condom use? An analysis from South Africa. *AIDS Education and Prevention*, 15(3), 231-244.

Castora, M., (2005). The assessment of university students' knowledge, attitudes, and behaviours toward sex. University of Central Florida. *Undergraduate Research Journal*, 7(7), 1-23.

Cohen, L., Manion, L., & Morrison K. (2000). *Research methods in education* (5th ed.). London: Routledge Falmer.

Flick, U. (2014). *An introduction to qualitative research* (5th ed.). London: Sage.

Fram, S. (2013). The constant comparative analysis method outside of grounded theory. *The Qualitative Report*, 18(1), 1-25.

Ghana AIDS Commission (2019). *National and sub-national HIV and AIDS estimates and projections: 2017 report*: Acca.

Ghana Statistical Service (2014). *Population and housing census: District analytical report*. Lower Manya-Krobo Municipality.

- Ghana Statistical Service (2012). 2010 population and housing census Ghana Statistical Service: LMKM district analytical report
- Gordon, M., & Inusah, F. (2003). *Attitude and perception of university students on voluntary HIV Testing: A case of the University of Ghana*. Unpublished Bachelor of Science Long Essay, School of Nursing, University of Ghana.
- Ikamba, L. M., & Ouedraogo, B. (2003). High-risk sexual behaviour: Knowledge, attitudes and practice among youths at Kichangani Ward, Tanga, Tanzania. *Action Research e-Reports*, 018.
- Kabiru, C. W., & Orpinas, P. (2009). Factors associated with sexual activity among high school students in Nairobi, Kenya. *Journal of Adolescence*, 32(4), 1023-1039.
- Kates, J. & Leggoe, A. W. (2005). *The HIV/AIDS Epidemic in Ghana-fact sheet*. Washington, DC: The Kaiser Family Foundation.
- Kerlinger, F. N. (2000). *Foundations of behavioural research* (4th ed.). Holt, NY: Harcourt College Publishers.
- Mayosi, B. M., Lawn, J. E., Van Niekerk, A., Bradshaw, D., Karim, S. S. A., Coovadia, H. M., & Team, L. S. A. (2012). Health in South Africa: Changes and challenges since 2009. *The Lancet*, 380(9858), 2029-2043.
- McIntyre, P., (2004). *Protecting young people from HIV and AIDS: The role of health services*. Geneva: World Health Organisation.
- McManus, A., & Dhar, L. (2008). Study of knowledge, perception and attitude of adolescent girls towards STIs/HIV, safer sex and sex education: A cross sectional survey of urban adolescent school girls in South Delhi, India). *BMC Women's Health*, 8(1), 12.
- Meekers D., Klein M., & Foyet L., (2001). *Patterns of HIV risk behaviour and condom use among youth in Yaoundé and Douala, Cameroon*. Washington, DC: Population Services International.
- Moletsane, R., de Lange, N., Mitchell, C., Stuart, J., Buthelezi, T., & Taylor, M. (2007). Photo-voice as a tool for analysis and activism in response to HIV and AIDS stigmatization in a rural KwaZulu-Natal school. *Journal of Child and Adolescent Mental Health*, 19(1), 19- 28.
- Monasch, R., & Mahly, M. (2006). Young people: The Centre of the HIV Epidemic. In Ross, D.A, Dick, B, and Ferguson, J., (Eds.), *Preventing HIV/AIDS in young people: A systematic review of the evidence from developing countries* (pp. 15-42). WHO Technical Report Series 938. Geneva: World Health Organisation.
- Muturi, N. W. (2005). Communication for HIV/AIDS prevention in Kenya: Social cultural considerations. *Journal of Health Communication*, 10(1), 77-98.

- NACC (2012). *The Kenya AIDS Epidemic update 2011*. Nairobi: NASCOP Press.
- Njogu, W. & Martin, T. C. (2003). The persisting gap between HIV/AIDS knowledge and perception among Kenyan youth. *GENUS.*, 62(2)135-168.
- Odirile, L. W. (2000). HIV/AIDS: Knowledge, attitudes and beliefs among University of Botswana undergraduate students. Unpublished Undergraduate Dissertation, University of Botswana.
- Oppong, A. K., & Oti-Boadi, M. (2013). HIV/AIDS knowledge among undergraduate university students: Implications for health education programs in Ghana. *African Health Sciences*, 13(2), 270-277.
- Owusu, A. Y. (2019). Social contexts of living with HIV/AIDS in the Eastern Region of Ghana. *İstanbul Üniversitesi Sosyoloji Dergisi*, 39(2), 425–454.
- Plattner, I. E. (2010). Does testing HIV negative encourage potentially dangerous beliefs? A study with young people in Botswana. *Journal of HIV/AIDS Research*, 2, 58-65.
- Reif, S., Geonnotti, K. L., & Whetten, K. (2006). HIV infection and AIDS in the Deep South. *American Journal of Public Health*, 96(6), 970-973.
- Resenstock, I. (1974). *Why people use health services*. Milbank memoria Fund Quarterly New York
- [Snelling, D., Omariba, D. W. R., Hong, S., Georgiades, K., Racine, Y., & Boyle, M. H. \(2007\). HIV/AIDS knowledge, women's education, epidemic severity, and protective sexual behavior in low- and middle-income countries. *Journal of Biosocial Science*, 39, 421-442.](#)
- UNAIDS & WHO (2002). *Epidemiological fact sheets on HIV/AIDS and sexually transmitted infections*. Geneva: UNAIDS Manuscript.
- UNAIDS (2004). *2004 Report on the Global AIDS Epidemic*. Geneva: UNAIDS.
- UNAIDS (2010). *Global report: UNAIDS report on the global AIDS epidemic 2010*. Geneva: UNAIDS.
- UNAIDS (2016). *Fact sheet*. Geneva: UNAIDS.
- UNAIDS (2018). *Global AIDS monitoring 2018*. Ukraine: UNAIDS.
- UNAIDS (2019). *Data on the state of the HIV/AIDS Epidemic*. Geneva: UNAIDS.
- WHO (2002). *The world health report 2002: reducing risks, promoting healthy life*: World Health Organization.

- Winfield, E. B. & Whaley, A. L. (2002). A comprehensive test of the health belief model in the prediction of condom use among African American College Students. *Journal of Black Psychology*, 28(4), 330-346.
- Yin, R. K. (2003). *Case study research: Design and methods* (3rd ed.). Thousand Oaks, CA: Sage.
- Young, T., Arens, F. J., Kennedy, G. E., Laurie, J. W., & Rutherford, G. W. (2007). Antiretroviral Post-Exposure Prophylaxis (PEP) for occupational HIV Exposure. *Cochrane Database of Systematic Reviews*, 1, CD002835.
- Zellner, S. L. (2003). Condom use and accuracy of AIDS Knowledge in Cote d'Ivoire. *International Family Planning Perspectives*, 29(1), 41-47.