

**SCHOOL OF PUBLIC HEALTH
COLLEGE OF HEALTH SCIENCES
UNIVERSITY OF GHANA**



**EFFECT OF COMPREHENSIVE HIV/AIDS KNOWLEDGE ON RISKY
SEXUAL BEHAVIOUR OF YOUNG MEN IN CAPE COAST METROPOLIS**

BY

ADWOA OTIWAA EKANEM

(10877028)

**A DISSERTATION SUBMITTED TO THE UNIVERSITY OF
GHANA, LEGON IN PARTIAL FULFILLMENT OF THE
REQUIREMENT FOR THE AWARD OF MASTER OF
PUBLIC HEALTH (MPH) DEGREE**

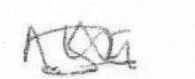
**DEPARTMENT OF POPULATION, FAMILY AND
REPRODUCTIVE HEALTH**

APRIL, 2022

DECLARATION

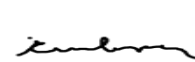
I hereby declare that this work is the result of my own research, carried out in the School of Public Health, University of Ghana, Legon under the supervision of Prof. Kwasi Torpey. I also declare that, all documents used have been duly acknowledged and referenced. I declare that, this dissertation has not been presented either in whole or in part for another degree anywhere.

Adwoa Otiwaa Ekanem



(Student)

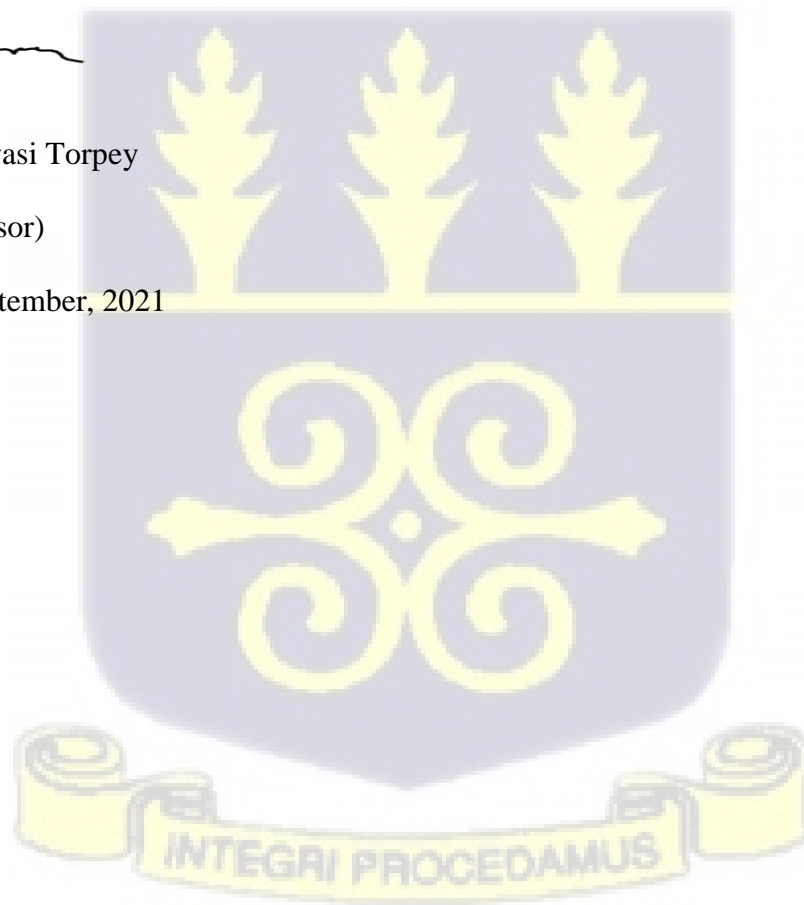
26th September, 2022



Prof. Kwasi Torpey

(Supervisor)

26th September, 2021



DEDICATION

I dedicate this work to the Mighty God and my entire family.



ACKNOWLEDGEMENTS

I would like to express my heartfelt gratitude to my supervisor, Prof. Kwasi Torpey for his guidance and support throughout this project. I may not be able to say it all but studying under his supervision has been a great blessing to me.

Thank you very much Prof. Kwasi Torpey, Adwoa Ekanem is very grateful to you.



ABSTRACT

Background: HIV/AIDS has evolved into one of the world's most destructive diseases. HIV/AIDS is regarded as one of the world's most serious public health problems. Knowledge of HIV/AIDS is important for ensuring safer conduct and lowering the risk of contracting the disease. While knowledge about the disease is a prerequisite for improvement, it has also been shown that increased knowledge about AIDS is not a predictor of behavioural change.

Aim: This study identified the effects of comprehensive HIV/AIDS knowledge on the sexual behaviour of young men in the Cape Coast Metropolis.

Methods: A cross-sectional quantitative design was employed to identify the effects of comprehensive HIV/AIDS knowledge on the sexual behaviour of young men in the Cape Coast Metropolis. The study population used young men between the ages of 10-24 years and permanent residents of the Cape Coast Metropolis. A multi-staged sampling technique was used to recruit 198 respondents at their respective households. Parents and guardians consented for those less than 18 years to respond to the questionnaire for the study.

Result: About thirty-four percent of the sampled population did not have comprehensive knowledge of HIV/AIDS while about 32% had high comprehensive knowledge of HIV/AIDS. Out of the 198 sampled young men in the study area, 122 representing 61.6 percent have ever had sexual intercourse. 76 out of 122 reported that they had their first sexual intercourse when they were between the ages of 15-19 years. Some common forms of sexual practices that were reported among young men in the Cape Coast metropolis were oral sex (24.2%), vaginal sex (71.0%) and multiple sexual partnership (71.2%). Only 24.2 % reported frequent use of condom during sexual intercourse while non-use of condom was really high among young men (75.8%).



TABLE OF CONTENTS

	Page
DECLARATION	i
DEDICATION	ii
ACKNOWLEDGEMENTS	iii
ABSTRACT	iv
TABLE OF CONTENTS	v
LIST OF FIGURES	x
LIST OF TABLES	xi
LIST OF ABBREVIATIONS	xi
DEFINITION OF TERMS	xii
CHAPTER ONE:INTRODUCION	1
1.1 Background to the Study	1
1.2 Statement of the Problem	4
1.3 Objectives of the Study	6
1.3.1 General Objectives	6
1.3.2 Specific Objectives	6
1.4 Research Questions	6
1.5 Justification	6
1.6 Conceptual Framework	7
1.6.1 Narrative Summary	8
CHAPTER TWO:LITERATURE REVIEW	10
2.1 Introduction	10
2.2 Global HIV Prevalence	10

2.3 Prevalence of HIV in Sub-Saharan Africa	11
2.4 Prevalence of HIV in Ghana	12
2.5 Interventions to reduce HIV in Ghana	12
2.5.1 HIV Testing	12
2.5.2 HIV Prevention Activities	13
2.5.3 WHO “treat all”	14
2.6 Risky sexual behaviour	14
2.7 Prevalence of risky sexual behaviour	15
2.8 How risky sexual behaviour affects HIV prevalence	16
2.9 Comprehensive HIV Knowledge	16
2.9.1 Effect of comprehensive HIV knowledge on risky sexual behaviour	18
2.10. Socio-demographic factors influencing risky sexual behaviour	19
2.11 Sexual practices among young men	21
CHAPTER THREE:METHODS	25
3.1 Introduction	25
3.2 Study Design	25
3.3 Study Area	25
3.4 Study Population	26
3.5 Study Variables	26
3.5.1 Dependent variable	26
3.5.2 Independent variables	26
3.6 Sampling Technique	27
3.6.1 Sampling Technique for the Study	27

3.6.2 Selection of communities	27
3.6.3 Selection of Households	27
3.6.4 Sample Size Determination	27
3.6.5 Selection criteria	28
3.7 Data Collection technique/ Method &Tools	28
3.8 Pre-test	29
3.9 Quality Control	30
3.10 Data Analysis	30
3.11 Study limitation	30
3.12.1 Clearance to conduct the study	31
3.12.2 Study area approval	31
3.12.3 Informed Consent /Assent	31
3.12.4 Risks and Benefits	31
3.12.5 Voluntary Participation/ Withdrawal	32
3.12.6 Privacy/Confidentiality	32
3.12.7 Compensation	32
3.12.8 Data storage and usage	32
3.12.9 Covid 19 protocol observation	33
CHAPTER FOUR:RESULTS	34
4.1 Introduction	34
4.2. Socio-demographic characteristics of respondents	34
4.3 Comprehensive knowledge on HIV/AIDS	36
4.4 Sexual practices	37

4.4.1 Ever had sex	38
4.4.2 Age at first sexual intercourse	38
4.4.3 Oral sex	38
4.4.4. Vaginal Sex	39
4.4.5. Sexual Partners	40
4.4.6 Frequent condom use	41
4.4.7. Risky sexual behaviour	41
4.4.8 Alcohol intake and sexual intercourse	41
4.5 Comprehensive knowledge on HIV/AIDS and risky sexual behaviour	42
CHAPTER FIVE:DISCUSSION	45
5.1 Introduction	45
5.2 Comprehensive knowledge of HIV/AIDS	45
5.3 Sexual practices	46
5.4 Effect of comprehensive knowledge of HIV on risky sexual behaviour	50
CHAPTER SIX:CONCLUSION AND RECOMMENDATION	52
6. 1. Conclusion	52
6.2 Recommendation	53
REFERENCES	54
APPENDICES	66
APPENDIX I QUESTIONNAIRE	66
APPENDIX II INFORMATION SHEET FOR PARENTS/GUARDIANS	72
APPENDIX III PARENT CONSENT FORM FOR PARTICIPANT IN THE STUDY	76
INFORMATION SHEET FOR CHILD	77

APPENDIX IV: CHILD ASSENT FORM IN THE STUDY

81

APPENDIX V ETHICAL CLEARANCE

83



LIST OF FIGURES

Figure	Page
Figure 1: Framework of factors used to measure the effect of comprehensive HIV/AIDS knowledge on sexual behaviour of young men	8
Figure 2: A bar chart distribution of comprehensive knowledge on HIV/AIDS among young men in the Cape Coast Metropolis	37
Figure 3: A bar chart showing the distribution of oral sex practice among young men in Cape Coast	39
Figure 4: A bar chart distribution of the number of sexual partners among young men.	40
Figure 5: A bar chart distribution of alcohol intake and sexual intercourse among young men	42



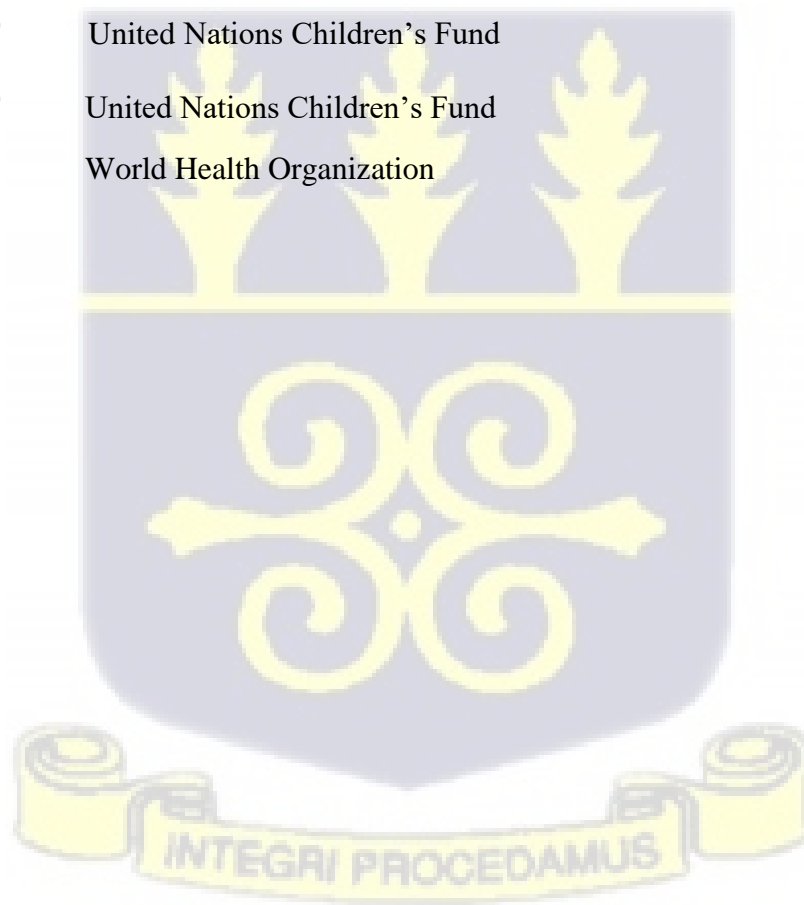
LIST OF TABLES

Table	Page
Table 1: Frequency distribution of the socio-demographic characteristics of young men in the Cape Coast Metropolis	35
Table 2: Age at first sex among young men	38
Table 3: A binary logistic regression of risky sexual behaviour and comprehensive knowledge on HIV/AIDS	44



LIST OF ABBREVIATIONS

AIDS	Acquired Immunodeficiency Syndrome
GAC	Ghana Aids Commission
GDHS	Ghana Demographic Health Survey
GHS	Ghana Health Service
HIV	Human Immunodeficiency Virus
RSB	Risky Sexual Behaviour
SSA	sub-Saharan Africa
STI	Sexually Transmitted Infections
UNAIDS	Joint United Nations Programme on HIV/AIDS
UNFPA	United Nations Population Fund
UNICEF	United Nations Children's Fund
UNICEF	United Nations Children's Fund
WHO	World Health Organization



DEFINITION OF TERMS

Comprehensive HIV/AIDS knowledge: Knowing the two most common preventive methods and knowing that a healthy-looking person can have HIV and be able to reject two most local misconceptions about HIV transmission.

Young men: Males between the ages of 10-24 years

Sexual debut: Having sexual intercourse before or at age 14years

Non-Risky sexual behaviours: Non risky sexual behaviour is defined as not having sex and or having one sexual partner and consistent condom use during sex.

Risky sexual behaviour: Defined as 1.non condom use and one sexual partnership, 2. non condom use and multiple sexual partnership and 3. condom use with multiple sexual partnership.



CHAPTER ONE

INTRODUCCION

1.1 Background to the Study

HIV/AIDS has evolved into a world destructive disease. HIV/AIDS is regarded as one of the world's most serious public health problems (World Health Organization [WHO], 2018). Since the Millennium Development Goals were established in 2000, the global response to HIV has prevented 45 million new HIV infections and nearly 10 million AIDS-related deaths (SDG Report, 2018). As at 2020, 36.1 million people had been infected with HIV (UNAIDS, 2020).

The effect of HIV/AIDS has alarmed policymakers because it threatens to stifle socioeconomic development by increasing morbidity and mortality among people in productive age groups (UNAIDS, 2020). Furthermore, at the global level, there is a negative relationship between the levels of human welfare as calculated by Ha et al. (2020). With little above 10% of the entire population of the world, sub-Saharan Africa stands as the territory badly affected by the HIV/AIDS epidemic, with the highest rates in Southern Africa (UNAIDS, 2020). In 2019, nearly 71 percent of the estimated 35 million people having HIV/AIDS globally lived in sub-Saharan Africa.

Thus, the total number of years individuals can live in sub-Saharan African region has been reducing since HIV/AIDS found its way into the region. Increased death rates, coupled with, over dependence and low work output have resulted into poverty in many low- and middle-income countries (Guure et al., 2020).

Due to the physical, psychological, social, and economic factors, young people are especially prone to HIV infection (Guure et al., 2020). Issues on sexual exploits can be

viewed from two perspectives: the protective or risky sexual behaviour (Ajayi & Okeke, 2019). Protective sexual behaviours are, consistent use of condom, abstinence and sexual fidelity that prevent unwanted pregnancies and infections mainly acquired through sexual intercourse (Ajayi & Okeke, 2019).

On the other hand, risky sexual behaviours denote behaviours such as having more than one sexual partner, non-use or infrequent condom use, or having sex which greatly increases susceptibility to unwanted pregnancies and infections (Darteh, 2020). Thus, indulging in sex without condom, as well as having several sexual partners, escalates the level of risk among young people (Ajayi & Okeke, 2019).

Sex has been identified as the major mode of transmission of HIV in SSA (UNICEF, 2019).

On the other hand, the availability of antiretroviral therapy (ART) has mitigated the effect of the disease into a medical condition that can be managed leading to a decline of the total deaths occurring from AIDS and HIV incidence generally (Odimegwu, Somefun & Chisumpa, 2019).

Even though HIV infection can be transmitted in a variety of ways, heterosexual intercourse is the most common method in Sub-Saharan Africa (SSA). As a result, individual sexual activity influences the rate at which HIV infection spreads in the African population. To effectively avoid further HIV cases, safe sex, especially among young people, is critical (Dartey, 2020).

It is worth noting that, risky sexual behaviours vary within the sexes among young people (Odimegwu, Somefun & Chisumpa, 2019). On one hand, males are more prone to having sex with more than one partner; on the other hand, females usually stand a greater chance in engaging in sexual intercourse at an earlier age (Amo-Adjei & Tuoyire, 2018). Risky

sexual behaviours continue to vary by the educational attainment of the individual and their income (Maonga, Gondwe & Machira, 2018). The elements that impact risky sexual behaviours, affects the attainment of the 90-90-90 agenda for HIV (UNAIDS, 2018), especially in regions like sub-Saharan Africa (SSA). The pressure to indulge in sex at a younger age, unsafe sex, bullying, the compulsion to have a child, non-availability of reproductive health facilities that are user-friendly, misconceived condom expectations, low personal risk evaluation, and low estimation of one's ability, and lower precautionary actions on the part of the individual are all factors.

Knowledge of HIV/AIDS is important for ensuring better conduct and reducing the risk of getting HIV/AIDS (Guure et. al., 2020). While having appropriate knowledge on HIV/AIDS is very important for improvement, available evidence has also been shown that having adequate knowledge on HIV/AIDS is not an automatic indication of behavioural change. Adolescents in Ghana have a lack of knowledge about HIV and other STIs, and there is scarcity of literature in this field (Dickson et al., 2021).

In essence, Dartey, Dickson and Doku (2019) gathered data on several SSA countries' women's basic knowledge of HIV/AIDS, its aetiology, transmission, preventive methods, and sexual activities. They discovered that, despite the participants' mean score of 7.7 out of 12 on HIV/AIDS awareness questions, there was an unsteady level of literacy on AIDS with substantial gender differences. Although learners were able to recognize how the disease is transmitted with its preventive modalities, they were not well informed on the organism that causes HIV/ AIDS (Dickson, Ameyaw & Darteh, 2020).

According to the Ghana Demographic Health Survey (GDHS) conducted in 2008 and 2014, 98 percent of women and 99 percent of men respectively in Ghana were aware of HIV

(GDHS, 2014). In the 2014 GDHS, 97.9% of men aged 15 to 24 reported that they are aware of HIV/AIDS. However, one quarter of the female population and males totaling 33% between the ages of 15 to 24 years qualified as having comprehensive knowledge of HIV, indicating that this has not translated into comprehensive knowledge and healthy sexual conduct (UNAIDS, 2020). This has health implications for the prevention and transmission of HIV/AIDS, as well as policy formulation.

The HIV epidemic in Ghana is generalized, in 2016 the prevalence was 2.4 percent, up 0.6 percent from 2015. Many people believed that attempts to minimize new infections were succeeding in 2014, when the median HIV prevalence, was calculated by the HIV Sentinel Surveillance Survey (HSS), as 1.6. However, there has been a steady rise since 2014, necessitating a closer examination. The prevalence of HIV in different regions has also changed in recent years. For example, prevalence rates in the Brong Ahafo region, which was previously about 1%, jumped to 5.95% in 2019 (National AIDS/STI Control Programme (NACP), 2020).

1.2 Statement of the Problem

Stopping and reversing the HIV outbreak by 2030 is one of the main goals of Sustainable Development Goals. A variety of variables, such as HIV rates in young people, rates of using condom, and awareness of HIV and AIDS, are used to track progress toward this goal. As a result, having more than one sexual partner is known to be among the primary causes of HIV transmission in sub-Saharan Africa (Dickson et al., 2021).

Furthermore, males and females 15–24 years are at an increased susceptibility of acquiring HIV, with three in every ten new HIV infections among adults occurring in this age group (UNICEF, 2020). Therefore, it was necessary for this study to focus on young people.

Without intervention, UNICEF estimates that new infections will slowly rise over the next decade, reaching 3.5 million by 2030, a 13 percent annual increase (UNICEF, 2020). Multiple sexual partners put young people at risk of contracting HIV/AIDS. While comprehensive HIV/AIDS knowledge alters sexual behaviour in young men, there is little research on the effect of comprehensive HIV/AIDS knowledge on risky sexual behaviour in young men in Ghana.

Not too many studies have been conducted in the case of Ghana to assess the knowledge on HIV/AIDS and the practice of risky sexual behaviours among young people. The ones that have been conducted either looked at only the knowledge of HIV/AIDS among young people (Darteh, 2020; Fenny, Crentsil & Asuman, 2017) and only the risky sexual behaviours among young people without combining the two. However, Dickson et al. (2021) looked at comprehensive knowledge on HIV and RSB among young people in sub-Saharan Africa (SSA). Their findings have no significant mention of the incidence in Ghana without any primary data hence the need to fill this knowledge gap in research. This study is being conducted to determine the knowledge level on comprehensive HIV/AIDS among young men in Cape Coast metropolis; find out the sexual practices of young men and investigate the effects of comprehensive HIV/AIDS knowledge on risky sexual behaviour among young men in the Cape Coast metropolis.

It is also worthy to note that, almost all studies conducted in this area relied on secondary data from the GDHS 2008 and 2014 which may be outdated because of the rapid changes in time. Hence, to provide a comprehensive report on the realities pertaining to this area of research, this study sought to utilise primary data.

1.3 Objectives of the Study

1.3.1 General Objectives

This study aimed to identify the effects of comprehensive HIV/AIDS knowledge on the sexual behaviour of young men in the Cape Coast Metropolis.

1.3.2 Specific Objectives

Specifically, the study sought to:

1. determine the comprehensive knowledge level on HIV/AIDS among young men (10-24 years) in the Cape Coast metropolis.
2. determine the sexual practices of young men (10-24years) in the Cape Cost metropolis.
3. determine the effects of comprehensive HIV/AIDS knowledge on risky sexual behaviour.

1.4 Research Questions

1. What is the knowledge level on comprehensive HIV/AIDS among young men in the Cape Coast metropolis?
2. What are the sexual practices of young men in the Cape Coast metropolis?
3. What are the effects of comprehensive HIV/AIDS knowledge on risky sexual behaviour?

1.5 Justification

This study is expected to contribute to literature, practice, and policy. The findings of this study are expected to provide the public, the Ghana Health Service and other stakeholders such as the National AIDS Control Program (NACP), Ghana AIDS Commission (GAC) with information on the comprehensive knowledge of young men in the Cape Coast

Metropolis. Thus, it will aid the Ghana Health Service to provide opportunities to increase education on the prevalence of HIV/AIDS and its accompanying effects. Also, this study will act as bases for further studies in understanding risky sexual behaviours among young men in the metropolis. Lastly, the findings of such a study will contribute to the discourse on promoting HIV and AIDS protective behaviours.

1.6 Conceptual Framework

The conceptual framework depicts the graphical representation of the relationship between the variables employed for the study. Figure 1 represents the framework for the study's objectives.



Figure 1: Conceptual Framework

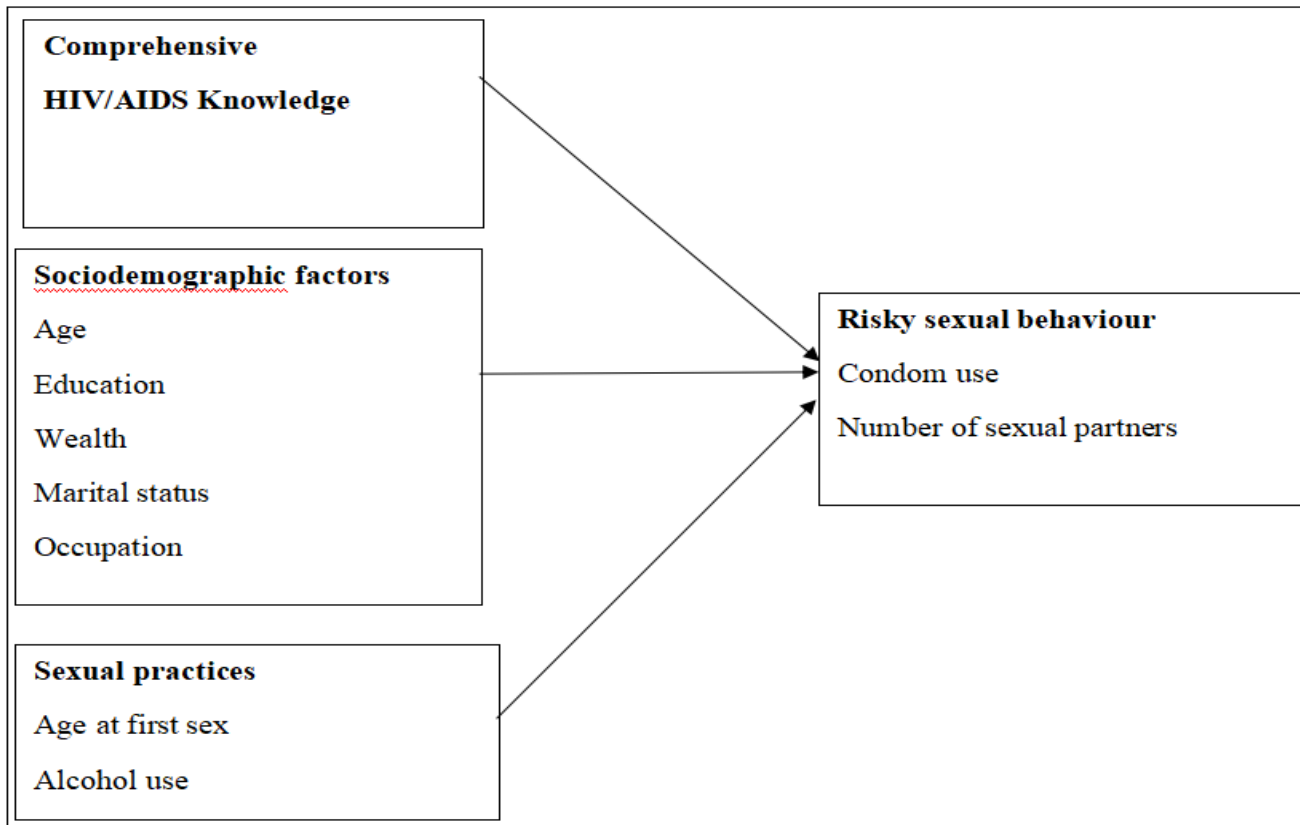


Figure 1: Framework of factors used to measure the effect of comprehensive HIV/AIDS knowledge on sexual behaviour of young men

1.6.1 Narrative Summary

This framework explains the relationship among the variables used for the study. Thus, this research work sought to investigate the effect of comprehensive knowledge of HIV/AIDS on sexual behaviour of young men. From the framework, risky sexual behaviour is considered as the dependent variable and measured by the number of sexual partners that one has, and condom use. From previous literature, Dickson et al. (2021) identified multiple sexual partners as one of primary drivers of HIV infection. Maonga et al. (2018) also found that risky sexual behaviours continue to change across the different levels of education and income. Furthermore, Ajayi and Okeke (2019) asserted that patterns such as

having sex without the use of condom, having numerous sexual partners among young people heightens the propensity of risk on a sexual behavioural scale. Thus, the framework is believed to paint the pictorial relationship among the variables derived.

From Figure 1, socio-demographic characteristics such as age, education, wealth, marital status, and occupation has a relationship with risky sexual behaviour. Again, sexual practices such as age at first sex, and alcohol use influences risky sexual behaviours which is determined by condom use and the number of sexual partners . From the same figure, risky sexual behaviour such as condom use, and number of sexual partners is influenced by comprehensive knowledge on HIV/AIDS.



CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter presents the review of relevant literature pertaining to this study. Thus, literature presented in this chapter include prevalence of HIV globally, in Sub-Saharan Africa and Ghana. It covers interventions to reduce HIV in Ghana, risky sexual behaviour, prevalence of risky sexual behaviour, effects of risky sexual behaviour on HIV prevalence, comprehensive HIV knowledge, socio-demographic factors affecting risky sexual behaviour and sexual practices among young men.

2.2 Global HIV Prevalence

Adolescents and young people form a greater proportion of individuals having HIV worldwide. In 2020 alone, 410,000 individuals from 10-24 years were firstly diagnosed as having HIV infection, of whom 150,000 were adolescents between the ages of 10 and 19 (UNICEF, 2020). Globally, in 2020, there were 37.7 million people [30.2 million – 45.1 million] people living with HIV. Out of this number, 36.0 million [28.9 million – 43.2 million] were adults, 1.7 million [1.2 million- 2.2 million] were children (0-14 years). Approximately, 53% of all people living with HIV were women and girls (UNAIDS, 2021). Seventy three percent of individual having HIV in 2020 were getting antiretroviral drugs for their condition. According to WHO (2020), the overall approximated adult (15-49 years) HIV prevalence has been reducing since the epidemic's peak in the year 2000 and gradually becoming stable in recent years.

2.3 Prevalence of HIV in Sub-Saharan Africa

According to the UNAIDS (2018), females aged 15-24 years in Sub-Saharan Africa (SSA) have twice the risk to contract HIV comparing to males of the same age cohort. Among the 36.7 million PLHIV, UNAIDS estimate that 25.6 million live in SSA. Malawi is a known low-income country within the southern part of Africa and recorded within the categories of countries with the highest cases of HIV among adults (15-49 years) at 9% contributing with about 38,000 people of newly certified HIV cases in 2018 according to UNAIDS (2018). A National HIV survey in Cameroon demonstrated that 3.7% of adults (15-49 years) are living with HIV representing approximately 500, 00 individuals (Mbanya, Sama & Tchounwou, 2018).

Data from UNAIDS show that with 7.7 million HIV-positive people, South Africa has the world's largest HIV epidemic. The general population has a high HIV prevalence rate of 20.4 percent. Males who have sex with men, transgender women, sex workers, and those who inject drugs have extremely high rates (UNAIDS, 2019). Data from the World Health Organization (WHO) fact sheet shows that, the national prevalence of HIV among individuals between the ages 10-19(adolescents) and 15-49 years adults aged in Tanzania is estimated to be 4.8% (WHO, 2019). Additionally, the total number of cases recorded among females is greater compared to the males (6.2% versus 3.7%).

Zambia saw a national HIV/AIDS epidemic with a prevalence rate of 11.3% among 15 years to 49 years adults as of 2018(UNAIDS, 2019). The country also recorded an annual decline in HIV cases from 60,000 in 2010 to 51, 000 in 2019 across all ages. Estimates from Kenya showed a decline in adult (15-49) HIV prevalence from 7.1% in 2007 to 5.6%

in 2019 (National AIDS and Sexually Transmitted Infection Control Program, 2020). Nigeria had an HIV prevalence of 1.4% among adults aged 15-49 years. Previous estimates had indicated a national HIV prevalence of 2.8% (NNAC, 2020).

Rwanda also experienced a generalized epidemic, with a 3.1% HIV prevalence rate among adults ages 15 to 49 years (UNAIDS, 2020). A study by Biressaw, Tilaye and Melese (2021) in Ethiopia to group HIV patients and identify elements that directly increases the prevalence of HIV within a group indicated a prevalence of 1.55% in Ethiopia. Badru et al., (2020) showed that 0.6% of young men tested positive for HIV during their survey. Also, a higher number of HIV cases was recorded among residents who lived in rural communities than those in urban communities (0.9% vrs 0.0%). The HIV prevalence between males and female were also different, males (0.8%) and females (0.4%).

2.4 Prevalence of HIV in Ghana

A current report by the Ghana AIDS Commission (GAC) (2021) revealed that the country's HIV prevalence is 1.68%. It also added that out of approximately 30.8 million people living in Ghana, 346,120 are documented to have tested positive for HIV with 18,928 new infections in 2020. Out of the 18,928 new infections recorded, adults (age 25 years and above) constituted 53%, young people (age 15-24 years) and children (0-14 yrs) representing 28% and 19% respectively. The figures revealed that females have the highest percentage of 83% as against 17% for males.

2.5 Interventions to reduce HIV in Ghana

2.5.1 HIV Testing

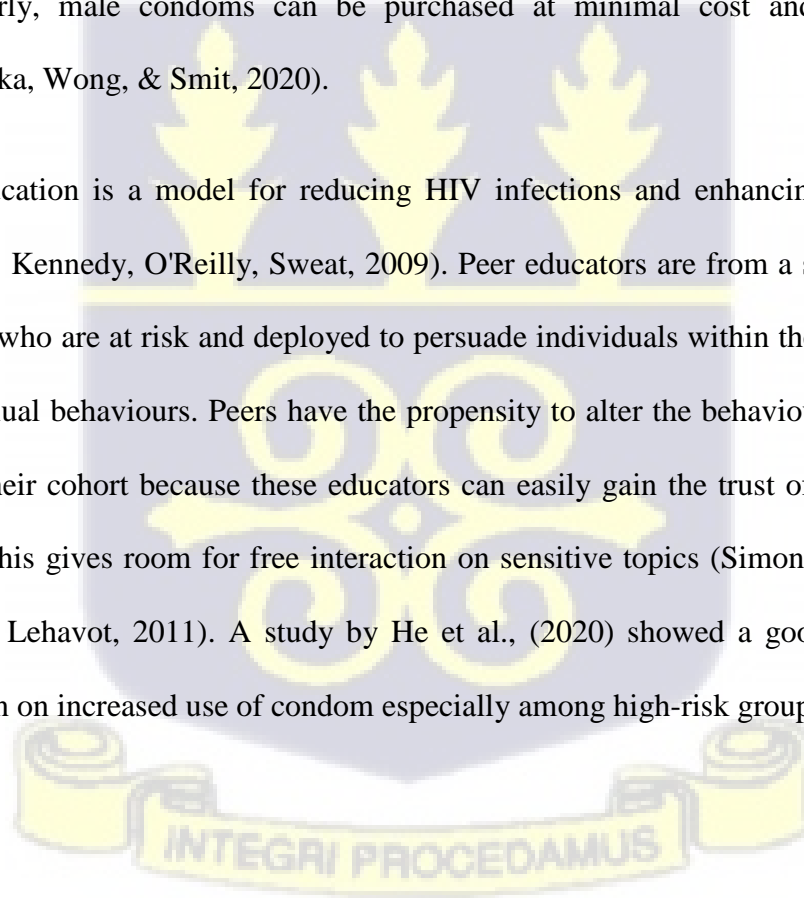
HIV testing is the first step to HIV prevention, treatment, care, and support services and to achieving the first 95 of the fast-track strategy by the year 2030. The Ghana AIDS

Commission estimated in 2020 that 63% of the 346,120 PLHIV population knew their HIV status.

2.5.2 HIV Prevention Activities

Unsafe sexual practices are widely recorded among young people resulting in unplanned pregnancies and STI's including HIV/AIDS (Chandra-Mouli, Svanemyr, Amin, Fogstad, Say, Girard, & Temmerman, 2015). Condoms are the only available method that inhibits unintended pregnancy and infection obtained through sexual intercourse like HIV. Generally, one of the most efficient methods used during sex and highly depended on by its users are condoms. Both male and female condoms have been identified as goods and can be purchased anywhere without necessarily being prescribed by a health worker; particularly, male condoms can be purchased at minimal cost and obtained easily (Beksinska, Wong, & Smit, 2020).

Peer education is a model for reducing HIV infections and enhancing health globally (Medley, Kennedy, O'Reilly, Sweat, 2009). Peer educators are from a similar age cohort as those who are at risk and deployed to persuade individuals within the group to modify risky sexual behaviours. Peers have the propensity to alter the behaviour of other people within their cohort because these educators can easily gain the trust of the others in the group. This gives room for free interaction on sensitive topics (Simoni, Nelson, Franks, Yard, & Lehavot, 2011). A study by He et al., (2020) showed a good impact of peer education on increased use of condom especially among high-risk group.



2.5.3 WHO “treat all”

In September 2016, the Government of Ghana adopted the World Health Organization (WHO) policy of “treat all” – which is the provision of antiretroviral treatment (ART) to all people living with HIV (PLHIV) irrespective of their cluster of differentiation 4 (CD4) count, previously used as a cut off to start treatment.

2.6 Risky sexual behaviour

Risky sexual behaviour (RSB) is defined in several ways. The commonest explanation is that it is a behaviour that heightens the vulnerability of a person to sexual and reproductive health problems like sexually transmitted infections (STIs) including HIV/AIDS, unwanted pregnancy, abortion, and psychological distress (Tadesse, 2015). RSB includes having sex at a young age, having sex with multiple sexual partners (MSP), having sex while using drugs or alcohol, and unprotected sexual behaviour.

The risk of developing a sexually transmitted infection (STI) rises when you have Risky sexual behaviour (Muche, Kassa, Berhe & Fekadu, 2017). Continuous and efficient use of condoms can confer protection from diseases that are normally transmitted through sex such as HIV (UNFPA, WHO and UNAIDS, 2015). However, there is evidence that condoms are frequently misused and that there are numerous impediments to their use. Consistent and non-condom use has been linked to issues with condom ‘fit and feel’, erection problems, unfavourable attitudes and diminished feeling and sexual enjoyment, according to research (Sanders, Yarber, Kaufman, Crosby, Graham, & Milhausen, 2012).

Incomplete condom use (not using condoms from start to finish of penetrative vaginal or anal intercourse), which is more typically stated by men who report bad condom

experiences reduces condom effectiveness (Sanders et al., 2012). Several studies have reported the merits of appropriate and regular condom use decreases young people's risk of HIV (Cleland & Ali, 2006; Valadez et al., 2014; Widman, Noar, Choukas-Bradley, & Francis, 2014). However, from several studies, only a few young Ghanaians use condoms consistently (Abdul-Rahman, Marrone, & Johansson, 2011; Bingenheimer & Stoebenau, 2016; Krugu et al., 2017). Regular condom use during sexual intercourse is low in SSA (Liang, et al., 2019). This heightens the possibility of the transmission of sexually transmitted infections including HIV (Morales et al., 2019). Darteh and Nnorom (2012) reported that the estimate of using condom during first sexual experience was 46.2% among young people who had one sexual partner in Ghana.

Similar trends were also seen in Ethiopia. Second year university received education on HIV and the first-year students did not receive any education on HIV. After the intervention, a study was conducted and the results showed that 74% of the second-year students who received the intervention (education of HIV) used condoms during sex as compared to 59% of the first-year group (Sahile, Mekuria & Yared, 2015).

2.7 Prevalence of risky sexual behaviour

In Aksum Town of North-West Ethiopia, the prevalence of risky sexual behaviour among young people was found to be 17.2% (Srahbzu & Tirfeneh, 2020). Also, Geremew et al., (2020) found the overall prevalence of risky sexual behaviour in North-West Ethiopia among young people to be 27.5%. A meta-analysis on risky sexual behaviour among male youths reported that 75% of them engaged in risky sexual behaviour such as non-condom use, and intake of alcohol before sexual intercourse (Berhan & Berhan, 2015).

A review by Amare, Yeneabat and Amare (2019), reported the prevalence of risky sexual behaviour among young college and university students to be 41.6%. Similarly, Watsi and Tarkang (2020), in a cross-section study in Ghana to identify demographic determinants of risky sexual behaviour among young students found the prevalence of risky sexual behaviour to be 41.5%. Awolugutu in his study found that 32% of respondent were involved in risky sexual behaviour in the Central Region. Similarly, a study by Godsway (2020) found the prevalence of risky sexual behaviour as 12% among senior high students in the Ho municipality of Ghana.

2.8 How risky sexual behaviour affects HIV prevalence

RSB and the associated exposure to infection are one of the major causes of preventable mortality in middle low-income countries including Ghana. The risk of contracting HIV infection is increased by unprotected sexual practices and multiple sexual partnerships (Mudhovozi, 2011). Risky sexual behaviour has a direct relationship with HIV prevalence. Involvement in risky sexual behaviour may promote the risk of getting HIV and consequently increase the number of HIV cases (Geremew et al., 2020).

2.9 Comprehensive HIV Knowledge

According to Ghana Demographic and Health Survey Report (GDHS,2014), comprehensive HIV/AIDS knowledge is defined as knowing the two most common preventive methods (having sex with only one faithful uninfected partner), knowing that a healthy-looking person can have HIV and be able to reject two most local misconceptions about HIV transmission (sharing of food and mosquitoes). This can be said that, having comprehensive knowledge on HIV/AIDS requires answering all questions correctly. Most

studies have referred to comprehensive knowledge of HIV/AIDS as a dichotomous variable (Blashill, Bedoya, Mayer, O’Cleirigh, Pinkston, Remmert & Safren, 2015; Ssewamala, Karimli, Torsten, Wang, Han, Ilic & Nabunya 2016; López, Shacham, & Brown, 2018). In these studies, “yes” is given if all five questions are answered correctly and “no” if all the questions are not answered correctly by the individual answering the questions.

Sahile, Mekuria and Yared (2015), defined comprehensive knowledge of HIV/AIDS as knowing HIV transmission method and rejecting two major myths and misconceptions, HIV transmission by mosquito bite and from eating raw meat prepared by a person infected with HIV. They further explained that comprehensive knowledge of HIV prevention means knowing abstaining from sexual intercourse, condom use, and limiting sex partner to uninfected partners prevent HIV.

Comprehensive correct HIV/AIDS knowledge is defined as correctly identifying the two major ways of preventing the sexual transmission of HIV and reject the most common misconceptions about HIV transmission. Similarly, Agegnehu et al., (2020) defines comprehensive knowledge of HIV/AIDS as the correct knowledge of two mechanisms to prevent HIV and rejection of three misconceptions about HIV (Elbadawi & Mirghani, 2016). Approximately, only 28% of young women and 34% of young men had comprehensive knowledge on HIV/AIDS prevention in SSA between 2012 and 2017 (UNAIDS, 2018).

In Nigeria, 34.3 % of the participants had comprehensive knowledge on HIV (Ajide & Balogun, 2018). It was further reported from the same study that the males had lower comprehensive knowledge on HIV compared to their female counterparts. This is different

from the Ghanaian picture which males have higher comprehensive HIV/AIDS knowledge as compared to their female counterparts (GDHS, 2014).

A study used data from the weighted sample of 4,095,447 youth (15-24 years old) who have known or nursed someone with HIV/AIDS from the Fourth South African National HIV, Behaviour and Health Survey (FSANBHS) (2012). According to the findings, one-quarter of the people had a 75 percent accurate understanding of the infection, while just 10% had a 100 percent exact understanding (De Wet, Akinyemi & Odimegwu, 2019).

Badru et al., (2020) studied 1,818 young adolescent, using data from the 2017 Akwa Ibom AIDS Indicator Survey to analyse comprehensive HIV knowledge, stigma and HIV risk perceptions highlighted a significant low levels of comprehensive HIV knowledge (9.4%) among young adolescents.

2.9.1 Effect of comprehensive HIV knowledge on risky sexual behaviour

Good knowledge about HIV has been associated with the intention to engage in low-risk sexual behaviour. Good knowledge on HIV empowers young people to refuse to be involved in any kind of risky sexual behaviour including transactional sex (Ajide & Balogun, 2018). On the other hand, risky sexual behaviour has also been seen in areas with higher HIV knowledge. A study conducted among young people aged 10-24 years revealed that, irrespective of the fact that general HIV knowledge was very high, risky sexual behaviour among young Ugandans remained high (Palomino-Gonzales, Kadengye & Mayega, 2019).

Furthermore, Darteh, Dickson and Amu (2020) conducted a study using secondary data from Ghana Demographic and Health Survey and Kenyan Demographic and Health Survey

to understand the sociodemographic factors influencing young people's risky sexual behaviour. The study revealed that, although HIV/AIDS knowledge of the young males and females was common, it was realized that risky sexual behaviour was very high in this age cohort.

An inverse relationship between comprehensive HIV/AIDS knowledge and risky sexual behaviour was identified in Nigeria among young people. Young people with higher HIV knowledge had lower risky sexual behaviour, showing the relevance of adding interventions to increase HIV knowledge in HIV prevention programmes (Pharr et al., 2020). Results from a study in SSA reported that between 2010 and 2018 in 28 SSA countries found that, 40% of young men and 54.4% of young women engaged in risky sexual behaviour. Furthermore, the study found that young men and young women who had comprehensive HIV and AIDS had lower odds of engaging in risky sexual behaviour contrary to those who had no comprehensive HIV and AIDS knowledge (Dickson et al., 2021).

2.10. Socio-demographic factors influencing risky sexual behaviour

Socio-demographic factors are individual level factors that distinguishes an individual from others. These factors can either protect or increase susceptibility to indulging in risky sexual behaviours. Gender, grade, religiosity, peer pressure, parental value of children, parent-child communication, school attachment, the use of alcohol and other drugs such as marijuana and tobacco have all been linked to risky sexual behaviour (Amoateng, Kalule-Sabiti & Arkaah, 2014).

Demographic factors such as age, education level, residence, wealth index, have been described as element that affect how young people behave sexually (Sekyi-Dickson et. al., 2021; Oginni et. al., 2017; Badru et. al., 2017; Seidu et. al., 2020; Darteh et. al., 2020).

Education to some extent confers protection for young men. It enhances the ability to read and understand basic information on HIV/AIDS in pamphlets, billboards, newspaper articles, and health briefs. School enrolment was found to also confer protection against females being sexually active and males having multiple sexual partners (Ishida, Stupp & McDonald, 2011). Males found within the least wealth percentile had a lower probability than those in the highest wealth percentile to have had multiple sexual partners. Young females who do not access formal education and characterized by lowest family wealth index, also engage in more risky behaviour than other girls (Geremew et al., 2016).

A study among female youth by Amoateng (2019) showed that females who had attended secondary school or higher had a reduced chance of indulging in risky sexual behaviour compared to those with primary and no schooling at all. The study by Amoateng (2019) also showed that females within the lowest class of wealth had a higher probability to engage in risky sexual behaviour. Kangmennaang, Mkandawire and Luginaah (2019) from their study in Ghana, Central African Republic (CAR) and Eswatini showed that the age at first sex of the study respondents determined risky sexual behaviour among respondents from Ghana and Eswatini. Contrarily, age at which young people had their first sex did not have any influence on risky behaviour among respondents from Central African Republic. Low socio-economic status was also identified as a positive predictor for risky sexual behaviour among young females from Ghana, Central African Republic and Eswatini.

Also, risky sexual behaviour among young people was significantly associated with age, level of education, wealth status and religion. Among males and females in Ghana, the odds of sexual risk-taking behaviour were higher among those who were employed than those who were unemployed. The opposite was seen in Kenya, males and females who had jobs had a lower probability of indulging in risky sexual behaviour than their colleagues who had no jobs (Darteh, Dickson & Amu, 2020). Srahbzu and Tirfeneh (2020) in Ethiopia identified factors such as poor social support, staying alone without relatives, lack of parental care and taking in alcohol to be statistically associated with risky sexual behaviour.

A study in Nigeria by Olorunsola, Muyibi, Irabor, Adetunji, Ismail and Ogunniyan (2021), to investigate patterns and factors affecting sexual behaviour among young adolescents revealed that predictors of risky sexual behaviour were not having tertiary level of education, lower social class, and conflict-oriented family types. Another study in Ethiopia conducted among sexually experienced secondary school students (15-24 years) revealed that sex, father educational level, drinking alcohol, perceived peer pressure, conversing with parents and perceived parental supervision were significantly associated with RSB (Wakasaa, Oljirab, Demenab, Regassab & Dagac, 2021).

2.11 Sexual practices among young men

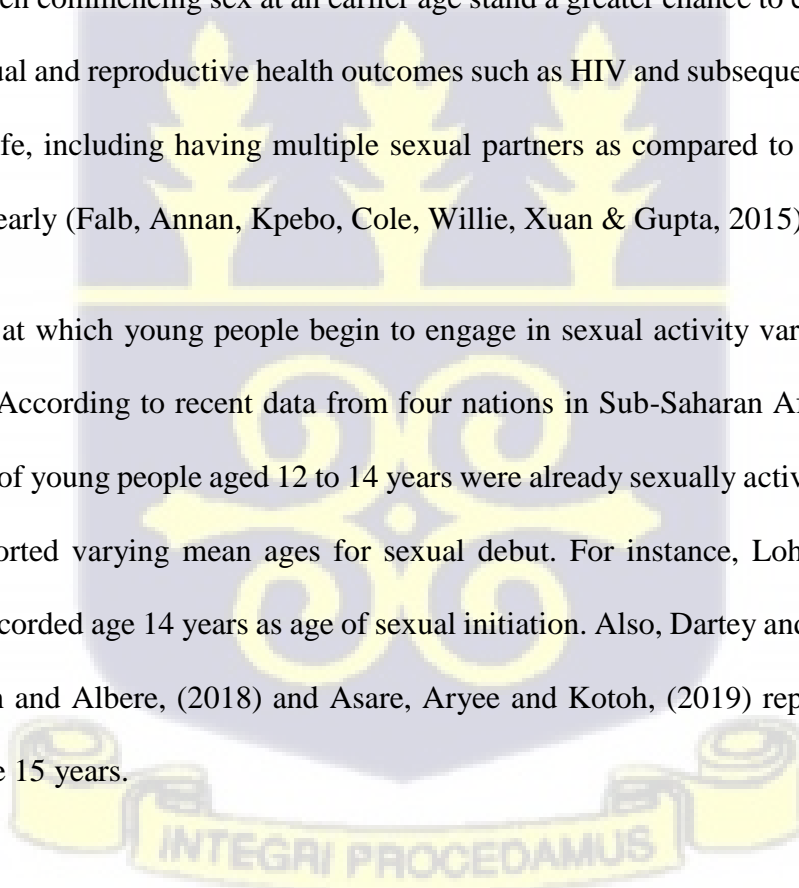
Sexual practice can be explained as any activity, solitary or between two persons, or in a group that induces sexual arousal (Teferra, Erena & Kebede, 2015). Transitioning from childhood to adulthood is demonstrated by variations in the body, psychology and sexual behaviours occurring from surge in hormone production. During this time, the increased production of androgens leads to increased sexual behaviour, contributing to early initiation of sexual activity. Unprotected sexual contact, early sexual debut, multiple

concurrent partners, accidental pregnancies, unsafe induced abortion, and HIV infection are some examples and effects of risky sexual practices.

Sexual maturation is one the stages that young people go through. This stage is depicted by expectancy toward the first sexual experience (Olesen et al., 2012). Young people are placed in the situation to take decision on whether to initiate sex at an earlier age or decline such experiences. This increases vulnerabilities especially when there are no support systems around leading to subsequent risk behaviours later in life (Gambadauro, Carli, Hadlaczky, Sarchiapone, Apter, Balazs, & Wasserman, 2018).

Early maturity has been associated with a decline in the age at first sexual intercourse. Young men commencing sex at an earlier age stand a greater chance to experience risks of poor sexual and reproductive health outcomes such as HIV and subsequent risk behaviours later in life, including having multiple sexual partners as compared to those who do not start sex early (Falb, Annan, Kpebo, Cole, Willie, Xuan & Gupta, 2015).

The age at which young people begin to engage in sexual activity varies by gender and country. According to recent data from four nations in Sub-Saharan Africa, a significant minority of young people aged 12 to 14 years were already sexually active. Several authors have reported varying mean ages for sexual debut. For instance, Lohman and Billings (2008) recorded age 14 years as age of sexual initiation. Also, Dartey and Nnorom, (2012), Nwondah and Albere, (2018) and Asare, Aryee and Kotoh, (2019) reported initiation of sex at age 15 years.



First sexual initiation could be done with full consent or under coercion as observed among young men in places like Botswana (Letamo & Mokgathe, 2013). However, a study in Ghana showed a smaller group consenting for their first sexual debut. The intriguing thing is that most of these sexual debuts are without condoms (Asare, Aryee & Kotoh, 2020).

A study in Ghana among 15-24 years reported that 50.4% were sexually active, and 77.3% of them initiated sex after 15 years (Asare, Aryee & Kotoh, 2019). Sexual debut was mostly consensual (94.6%), without use of condom (66%) and only 10.3% had multiple sexual partners. Also, sexual practices among young people aged 16-24 years from Botswana found that males were more likely to report engaging in sex before age 15 years and having more than two partners in the last 12 months (Chakalisa et al., 2019). The picture in Kenya was no different as it was discovered that above fifty percent of individuals (59.4%) had once had sex before. About 41.2% had their first coitus within the age of 15-19 years, while a total of 14% had their sexual debut at age 7-14 years. Only 32.5% had used condoms consistently in the last 12 months. The male gender was associated with history of having multiple sexual partners (Mbuthia, Wanzala, Ngugi & Nyamogoba, 2019). Geoffrey and Malinga (2020) in Kenya showed that, 63-77% reported using condoms inconsistently; 53-55% reported having sex before they were 18 and 8-10% reported having multiple sex partners.

Substance-use disorders is mostly linked to high-risk sexual behaviour (HRSB). For example, certain authors have shown that after the taking in of alcohol, an individual may indulge into several types of risky behaviours, such as involvement with many sexual partners and failing to remember to use a condom while having sexual intercourse or simply using it in an inappropriate manner (Boisvert, Boislard & Poulin, 2017). Alcohol

singly may enhance a social environment where one is more likely to indulge in having sexual intercourse without the use condom. It has also been proven such behaviours usually co-occur with several forms of deviant behaviours.



CHAPTER THREE

METHODS

3.1 Introduction

This chapter will present the methods employed to provide responses to the research questions. Thus, this chapter will pay attention to the design adopted for this research works, the area the study was carried out, the sample size, variables for this research work, the data collection instrument, data collection procedures and data analysis procedures.

3.2 Study Design

A cross-sectional design was employed to identify the effects of comprehensive HIV/AIDS knowledge on the sexual behaviour of young men in the Cape Coast Metropolis.

3.3 Study Area

The study area for this study was the Cape Coast Metropolis. Cape Coast is one of the 23 districts and the only metropolis in the Central Region. Cape Coast has the following boundaries, the Gulf of Guinea forms the southern border, Komenda Edina Eguafo Abrem to the west, Abura Asebu Kwamankese District at the east and Twifo Hemang Lower Denkyira District forming the northern border. The metropolis covers an approximated area of 122 square kilometres. Cape Coast is divided into two administrative sub-Metropolitan Districts that is Cape Coast North and South. The north and south have three and four zones respectively. Each of these zones is made up of several communities. The Cape Coast Metropolis is located in the Central Region of Ghana and it was selected for this study due to the high number (99.4%) of men who were aware or have heard about HIV/AIDS but the region is considered among other regions with records of high cases of HIV/AIDS and teenage pregnancy due to the practice of risky sexual behaviours.

3.4 Study Population

The study population for this research work were young men from the ages of 10-24 years and are permanent residents of the Cape Coast Metropolis.

3.5 Study Variables

3.5.1 Dependent variable

In this study, risky sexual behaviour is the dependent variable. This was measured in three categories 1. non condom use and one sexual partnership, 2. non condom use and multiple sexual partnership and 3. condom use with multiple sexual partnership. In this regard, respondents with one sexual partner and does not use condom during sex and or respondent with multiple sexual partners and does not use condom during sex and or respondent who has multiple sexual partners but uses condom during sex were all classified as risky sexual behaviour. Non risky sexual behaviour in this context is defined as respondent not having sex and or having one sexual partner and consistent condom use during sex.

3.5.2 Independent variables

The study used comprehensive HIV/AIDS knowledge as the key independent variable. Other variables that were used in the study are age, educational level, marital status, occupational status, and wealth quintile. These independent variables are of great interest because they could influence the behaviour of young men and could be risk or protective factors per the reviewed literature.

To ascertain the respondents' level of knowledge on HIV/AIDS, five questions extracted from the DHS (2014) was asked, of which the respondents' responses to the questions was marked to determine their HIV/AIDS knowledge level.

3.6 Sampling Technique

3.6.1 Sampling Technique for the Study

A multi-stage sampling technique was used for the study.

3.6.2 Selection of communities

A random sampling technique was used to select four communities from Cape Coast north and south sub district. All communities in the two sub districts were assigned numbers. A computer software was used to randomly select four numbers and the corresponding communities were selected.

3.6.3 Selection of Households

A register with the list of all households within the four selected communities was obtained from the district assembly. The number of households to be selected was proportionate to the total population within the community.

A total of 2510 households were identified within the four selected communities. These households were assigned codes till the last house. A sampling interval was generated by dividing the entire households within the four communities by the sample size obtained from the sample size calculation ($2510/196=13$ approximated). The approximate number $1/13^{\text{th}}$ obtained was the sampling frame. A random number 5 was generated from the sampling frame and that formed the households counted and included for the sampling of respondents.

3.6.4 Sample Size Determination

To select a representative sample from the target population for this study, the Cochran sample size formula was used. The Cochran Formula is given as:

$$n = z^2 (p \times q) / d^2$$

n=sample size

z=z-statistic for 95% level of confidence which is 1.96,

d=precision at which P-value of 0.05 with 95% confidence

p=expected prevalence or proportion of risky sexual behaviour (12%)

$$n = (1.962 \times 0.12 \times 0.88) / 0.052$$

$$n = (3.8416 \times 0.1056) / 0.0025$$

$$n = 0.40567296 / 0.0025$$

$$n = 162.2692 = 163 \text{ students}$$

20% will be added to the calculated sample size to account for non-response therefore increasing the sample size to 196 participants.

3.6.5 Selection criteria

Respondents were recruited from each household for the study. However, in household with more than one young man a yes and no balloting was used to select the respondent. A respondent who selects yes was included while a no was not recruited to allow for fairness. Young men between the ages of 10-24 years who are permanent residents of the Cape Coast Metropolis were included. In the same vein, young men between the ages of 10-17 years who were permitted by their parents or guardians were included. In addition, young men between the ages of 18-24 years who gave their consent were included.

3.7 Data Collection technique/ Method & Tools

Questionnaire was the main instrument for data collection for this study. The questionnaire was carefully designed to include closed-ended questions which relates the objectives guiding the study.

Three field workers were hired to assist in the field data collection. For this study, it was appropriate to train the field workers. The principal investigator arranged a one-day training programme between 9:00am to 2:00pm for the field workers. During the training, the principal researcher gave a detailed description of title and objectives guiding the study.

The principal investigator printed copies of all the documents needed for the study, shared copies to the fieldworkers and then took the field workers through for them to understand every aspect of the documents for the field data collection. Room was made for questions and clarifications which was addressed by the principal investigator. Community entry was done to meet the chiefs and other leaders within each community. This was to seek their permission and enhance support from parents to allow their wards participate in the study.

After explaining the purpose of the study to the respondents, the questionnaires were distributed to the respondents who consented or assented to participate in the study following the COVID-19 protocols of hand sanitizing and the wearing of face mask. To avoid information contamination, the instrument was taken away after each respondent had completed the questionnaire.

3.8 Pre-test

A pretesting of the questionnaire was conducted using 20 young men at the Komenda Edina Eguafo Abrem Municipality (KEEA). The choice for Komenda Edina Eguafo Abrem Municipality was because the characteristics and the experiences of young men are not significantly different from their colleagues in the Cape Coast Metropolis.

3.9 Quality Control

Pre-testing of the data collection tool was carried out to ensure that the instrument can collect data that will answer the research questions. The pre-test was also conducted to identify any errors and correct them before the actual data collection. During the data collection, questionnaires were reviewed by the principal investigator for completeness on daily basis. This was to minimize any error in that data and also account for missing data.

3.10 Data Analysis

To address the research questions that were formulated to guide the study, the data obtained from respondents was filtered to remove any irrelevant responses and then coded. After, the data was analysed using Stata version 16.0. Descriptive and inferential statistics was used to analyse the data. Descriptive statistics such as frequencies, and percentages were used. The results were presented in tables, pie charts and bar charts. A binary logistic regression of risky sexual behaviour and comprehensive knowledge on HIV/AIDS was used as an inferential statistic. The results were presented using odds ratios, corresponding 95% confidence intervals, and the binary logistic regression analysis model summary statistics.

3.11 Study limitation

The study was limited to young men in the Cape Coast metropolis who are permanent residence and not temporary visitors in the various communities used for the study. Respondent were given self-administered questionnaire to fill by recalling their sexual behaviours which can have some level of recall bias.

3.12.1 Clearance to conduct the study

In conducting this research work, ethical approval was taken from the Ghana Health Service Ethics Review Committee. The Ghana Health Service Ethics Review Committee Number is GHS-ERC: 030/01/22.

3.12.2 Study area approval

Study area approval was obtained from opinion leaders within the communities where the questionnaires were administered.

3.12.3 Informed Consent /Assent

For the data collection process to be consented, the researcher gave a detailed description of the study to the respondents who were between the ages of 18-24 years. Afterwards, the consent form was given to them to sign or thumb print. Also, permission was obtained from the guardians of young respondents who were not 18 years to obtain their full approval to engage their wards. After the respondents had signed or thumb printed, the principal researcher also appends her signature and the date of signing.

3.12.4 Risks and Benefits

The study did not anticipate causing any harm to the respondents. However, looking at the sensitive nature of the study, some personal questions were asked which could create discomfort for respondent. Respondents were not obliged to respond if they were uncomfortable with some questions. There was also no direct benefit in taking part in this research work however, the information taken was useful in understanding the effect of comprehensive HIV/AIDS knowledge on risky sexual behaviour among young men.

3.12.5 Voluntary Participation/ Withdrawal

Respondents were assured they could choose to be involved in the study or not. They were also given the option not to respond to the questionnaire if the need be.

3.12.6 Privacy/Confidentiality

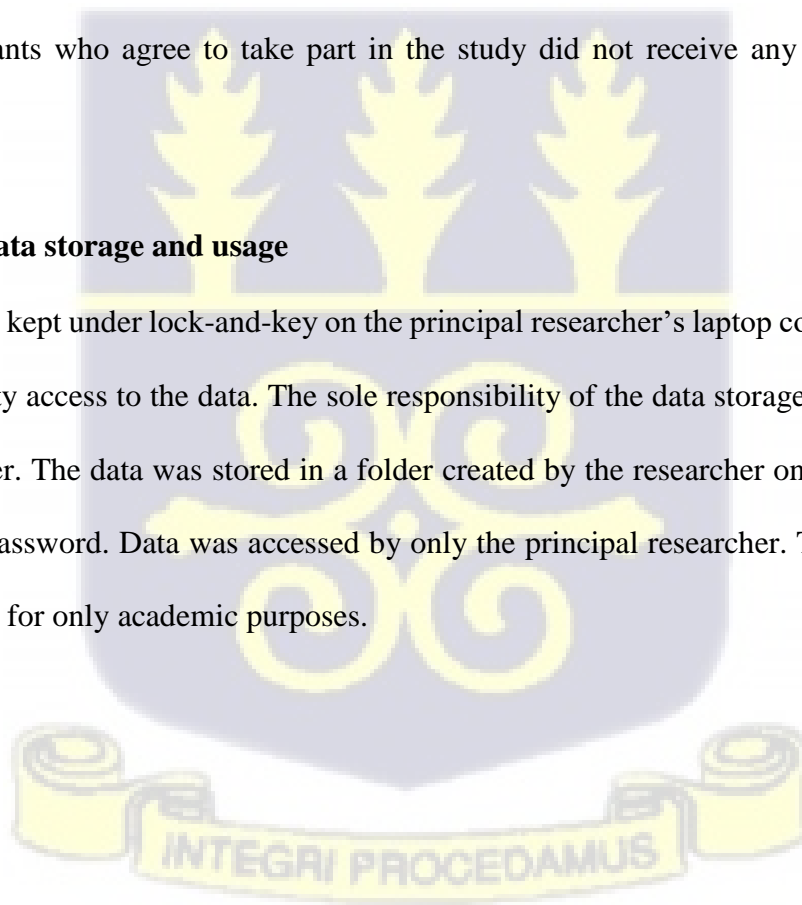
Respondents were given the opportunity to choose a place that was convenient and private to them to respond to the questionnaire. The data obtained was not shown to other persons including respondents' immediate command or supervisors in order to establish the highest level of confidentiality.

3.12.7 Compensation

Participants who agree to take part in the study did not receive any form of financial benefit.

3.12.8 Data storage and usage

Data was kept under lock-and-key on the principal researcher's laptop computer to prevent third party access to the data. The sole responsibility of the data storage was borne by the researcher. The data was stored in a folder created by the researcher on her laptop with a private password. Data was accessed by only the principal researcher. The data collected was used for only academic purposes.



3.12.9 Covid 19 protocol observation

COVID-19 national guideline and protocols was strictly implemented. This included ensuring social distancing, use of hand sanitizers and provision of nose mask for all respondents, researcher, and the research team. This was to ensure that no one is infected.



CHAPTER FOUR

RESULTS

4.1 Introduction

This chapter presents and discusses the results of the data analysis. The univariate analysis is presented in frequency distribution table and charts which show the distribution of the responses across the various categories inherent in the study variables. The bivariate analysis was modelled with a binary logistic regression to determine the significant differences in risky sexual behaviour across the various knowledge levels.

4.2. Socio-demographic characteristics of respondents

Table 1 demonstrates the socio-demographic characteristics of all the 198 sampled young men in the Cape Coast metropolis. Regarding the age of respondents, the data analysis revealed among the sampled young men from Cape Coast metropolis, majority were within the age range of 15-19 years, and constituted 43.4 percent of the entire study sample. The least represented age category was those within the range of 10-14 years and their corresponding percentage was 15.7%. On the marital status of respondents, the analysis showed that the study was dominated by single young men, they were 92.9 percent of the sample. The remaining category were those who indicated that they were married, and they made up only 7.1 percent of the sample.

Concerning the level of education of the respondent, only 9.1 percent of the respondents indicated tertiary as their highest educational attainment. More than half of the young men involved in the study indicated Senior High School as their highest educational level. From Table 1, it can be observed that more than half of the respondents professed the Christian religion. This category of respondents represented 70.2 percent. Only 17.7 percent of the

respondents indicated they were Muslims. The remaining category of respondent were affiliated to other religion other than these two and they made up 12.1 percent of the sample. The study collected data on the tribal groupings of respondents. The study revealed that a large proportion of the respondents indicated Fante as their tribe. The Fante tribal group constituted 59.6 percent of the respondents and the Ashanti group was only 12.1 percent. The other tribes were categorised as other due to their low representation in the study. Other tribes constituted 17.7 percent. Regarding wealth status, 41 out of the 198 representing 20.7% of the respondents belonged to the poorest category. In all 20.2% each belonged to middle and richer wealth status while 38 of the respondents representing 19.2% belonged to the poorer wealth status.

Table 1: Frequency distribution of the socio-demographic characteristics of young men in the Cape Coast Metropolis

Variables	Frequency (n=198)	Percentage (%)
Age		
<i>10-14 years</i>	31	15.7
<i>15-19 years</i>	86	43.4
<i>20-24 years</i>	81	40.9
Marital status		
<i>Single</i>	184	92.9
<i>Married</i>	14	7.1
Level of education		
<i>Basic education</i>	73	36.9
<i>Senior High</i>	103	54.0
<i>Tertiary</i>	18	9.1

Religious affiliation		
<i>Christian</i>	139	70.2
<i>Islam</i>	35	17.7
<i>Other</i>	24	12.1
Ethnicity		
<i>Fante</i>	118	59.6
<i>Ga</i>	21	10.6
<i>Ashanti</i>	24	12.1
<i>Other</i>	35	17.7
Wealth status		
<i>Poorest</i>	41	20.7
<i>Poorer</i>	38	19.2
<i>Middle</i>	40	20.2
<i>Richer</i>	40	20.2
<i>Richest</i>	39	19.7
Total	198	100

Source: Field data (2022)

4.3 Comprehensive knowledge on HIV/AIDS

To determine the comprehensive knowledge on HIV/AIDS three-level index was developed from standard questions measured on a Likert scale. The comprehensive knowledge index was grouped into three level with the first category being young men who did not have any comprehensive knowledge on HIV/AIDS. The second and third categories were those with low and high comprehensive knowledge on HIV/AIDS respectively. The figure below demonstrates the graphical distribution of the comprehensive knowledge on HIV/AIDS among young men in the Cape Coast Metropolis. From Figure 2, it is evident that 33.8 percent of the sampled young men in the Cape Coast Metropolis have no comprehensive knowledge on HIV/AIDS. A higher percentage of the sampled indicated

low comprehensive knowledge on HIV/AIDS issues. The least presented category was those with high comprehensive knowledge and they constituted 31.8 percent of the sampled young men in the Metropolis.

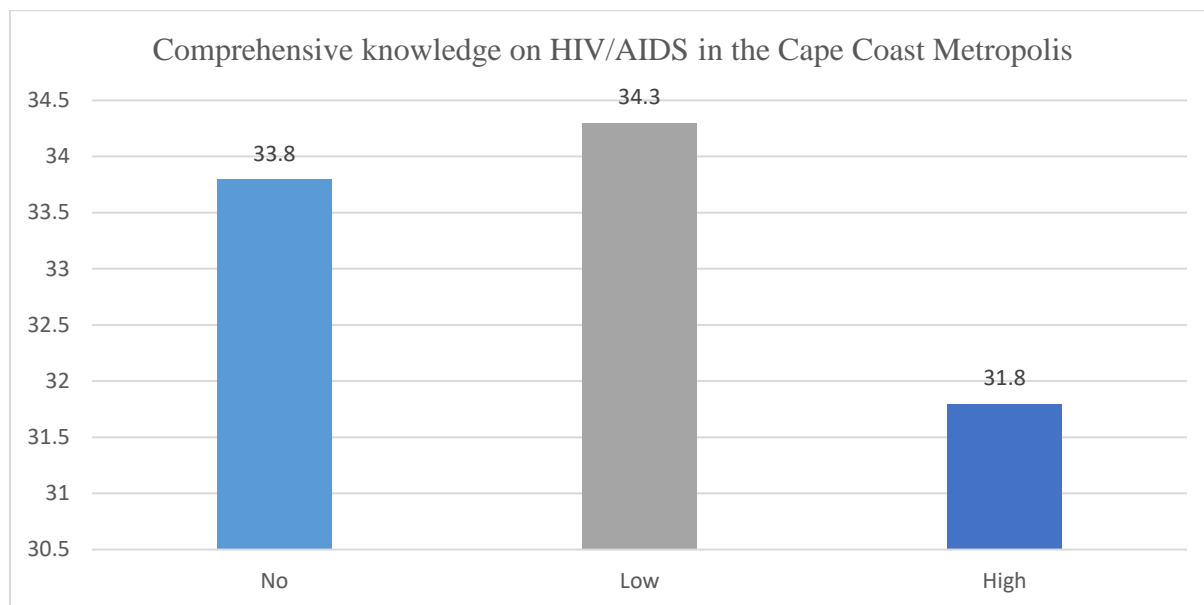


Figure 2: A bar chart distribution of comprehensive knowledge on HIV/AIDS among young men in the Cape Coast Metropolis

Source: Field data (2022)

4.4 Sexual practices

The second objective of the study was to determine the sexual practices among young men in the Cape Coast metropolis. As a result, the respondents were asked the various sexual practices. Among the sexual practice which respondents provided data on includes ever had sex, age at first sex, oral, anal, vaginal sex, and risky sexual behaviour. The questions on sexual practice further covered issues of frequent condom use and the number of partners the respondents have or engaged sexually with. Also, the study proceeded to know the general perception in the metropolis.

4.4.1 Ever had sex

This section presents the result of young men in Cape Coast Metropolis who have ever had sex. From the analysis, more than half of the respondents indicated that they have ever had sex before and this constituted 61.6% while those who indicated they had never had sex were 38.4 percent of the total sample.

4.4.2 Age at first sexual intercourse

For those who reported that they have ever had sex before, a further descriptive statistic was done to ascertain the age they experienced their first sexual intercourse. From Table 2, it is observed that more than half of the respondents; 76 out of 122 reported that they had their first sexual intercourse when they were between the ages of 15-19 years. About twenty-one percent had their first sexual intercourse ranging from 10-14 years while twenty respondents representing 16.4% experienced their first sexual intercourse from ages 20-24 years.

Table 2: Age at first sex among young men

Age at first sex	10-14 years		15-19 years		20-24 years		
	<i>N</i>	%	<i>N</i>	%	<i>N</i>	%	Total
	26	21.3	76	62.3	20	16.4	122 (100.0%)

Source: Field data (2022)

4.4.3 Oral sex

Figure 3 demonstrates the distribution responses regarding oral sex among young men in Cape Coast Metropolis. From the figure below, it can be observed the practice of oral sex

is low among the young men in the study. From the diagram, respondents who indicated they practice oral sex were only 24.2 percent. Those who indicated they do not practice oral sex were 75.8 percent.

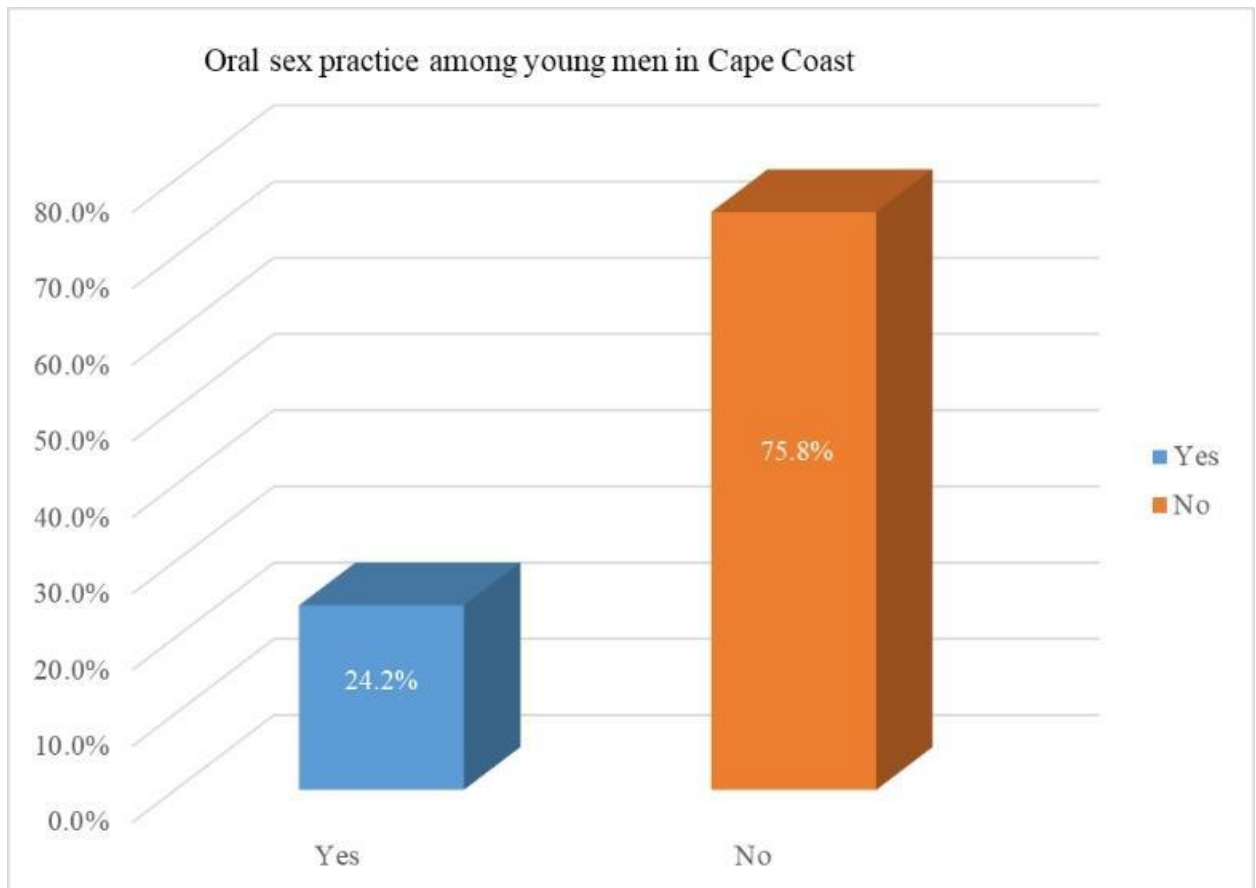


Figure 3: A bar chart showing the distribution of oral sex practice among young men in Cape Coast

Source: Field data (2022)

4.4.4. Vaginal Sex

The study also analysed data on the practice of vaginal sex among young men in the Cape Coast Metropolis. The result shows that approximately 71 percent of the young men in the

study engages in vaginal sex. The remaining 29 percent of the respondents reported they do not engage in vaginal sex.

4.4.5. Sexual Partners

The study also collected data on the number of sexual partners young people in the Cape Coast Metropolis have. Figure 4 illustrates the distribution of their responses across various categories. From the bar chart below, majority of the young men indicated having only one partner at the time of the study. This category constituted approximately 38 percent of the sample. The least represented category in the study were the young men who reported having more than two sexual partners, they made up 9.1 percent of the study. Other respondents reported having no sexual partner currently and some indicated having two, their proportions were 35.9 percent and 17.2 percent respectively.

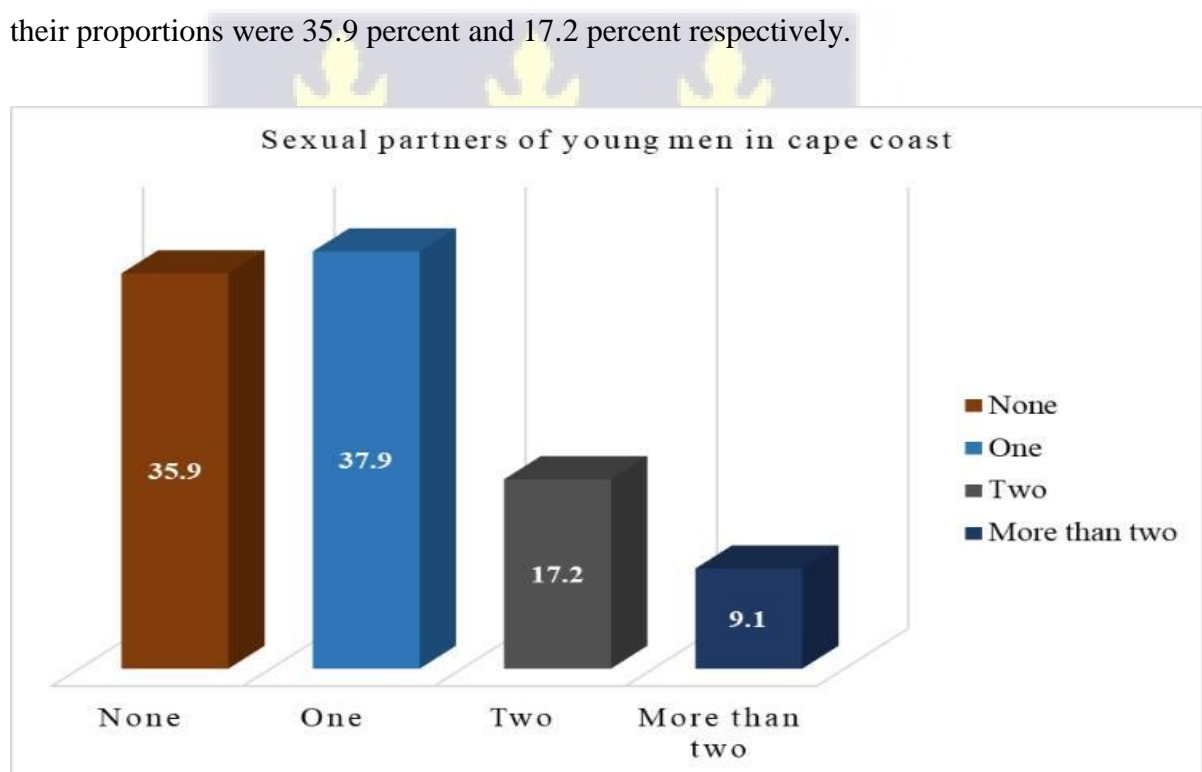


Figure 4: A bar chart distribution of the number of sexual partners among young men.

Source: Field data (2022)

4.4.6 Frequent condom use

In ascertaining the practice of safe sex among the youth in Cape Coast, respondents were asked if they used condom any time they engaged in a sexual act. From the analysis it was found that 75.8 percent of the young men in the study do not frequently use condom anytime they engage in sex. Only a small fraction of the young men in the study reported always using condom. They constituted approximately 24 percent of the young men in the study.

4.4.7. Risky sexual behaviour

Risk sexual behaviour was an index variable derived through a principal component analysis. The variables used to generate risky sexual behaviour were the number of sexual partners and frequent use of condom. The result shows that out of the 198 respondents, 63.6% engaged in risky sexual behaviour. About 36.4% percent of the respondents represent those who have never had sexual intercourse, had one sexual partner, and used condom during sexual intercourse.

4.4.8 Alcohol intake and sexual intercourse

The use of alcohol for sexual intercourse is a common phenomenon among many young people. The study asked participants whether they drink alcohol before sexual intercourse. From Figure 5, it is observed that out of the 122 young men who have ever had sex before, six representing 6.9 percent always took alcohol before sexual intercourse. Twenty-five young men representing 20.5 percent sometimes take alcohol before sexual intercourse while 91 representing 74.6 percent have never taken alcohol before sexual intercourse.

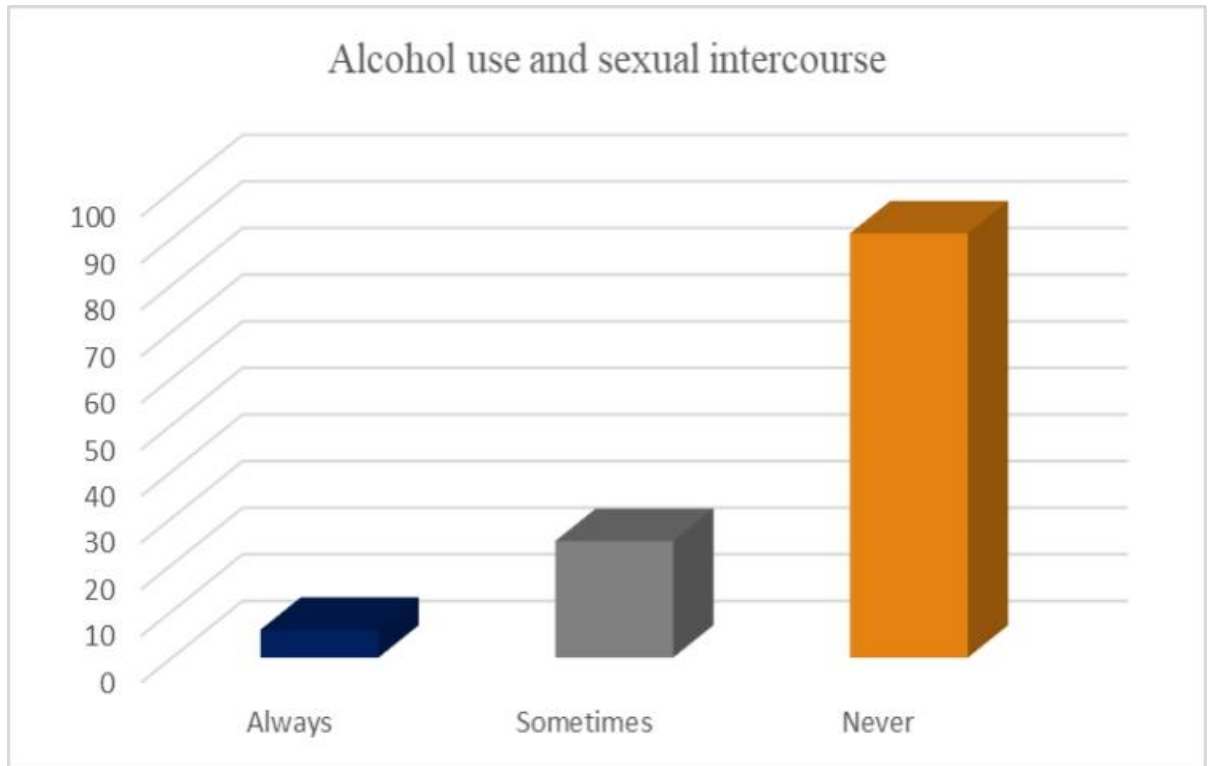


Figure 5: A bar chart distribution of alcohol intake and sexual intercourse among young men

Source: Field data (2022)

4.5 Comprehensive knowledge on HIV/AIDS and risky sexual behaviour

Table 2 shows the estimated odds ratios, corresponding 95% confidence intervals, and the binary logistic regression analysis model summary statistics. The null model (Model 0) is the constant model in the output of the regression model where no predicated variables are modelled. The null model shows the variability that exist in the dependent variable and when such variability is significant. In this study, the null model shows significant ($p < 0.05$) random effects variances of risky sexual behaviour among young men in the Cape Coast Metropolis. The study modelled only comprehensive HIV/AIDS knowledge to determine its associative effect on risky sexual behaviour among young men. Comprehensive knowledge of HIV/AIDS was modelled, (a stepwise approach to modelling was used. The

researcher first modelled comprehensive knowledge. After modelling the primary variable, the researcher included the confounders to ascertain whether the primary variable will remain significant after controlling for other variables in the model) the analysis showed that there is a statistically significant association between individual's knowledge and the odds of risky sexual behaviour. From model 1 in table 2, there is a statistically significant association between comprehensive knowledge on HIV/AIDS and the risky sexual behaviour. From the model statistics, young men who had no comprehensive knowledge had higher odds of engaging in risky sexual behaviour compared to the referenced category. Young men with no comprehensive knowledge were 3.5 times more likely to engage in risky sexual behaviour compared to those with high comprehensive knowledge. The odds of engaging in risky sexual behaviour decrease with an increase in the knowledge level of respondent. The odds of engaging in risky sexual behaviour was higher among young men with low comprehensive knowledge. Clearly, the impact of knowledge in reducing risk is evident in this analysis. In model 2, the confounders (age, level of education, wealth status and marital status) that interrupted the relationship between comprehensive knowledge on HIV/AIDS and risky sexual behaviour were controlled for in the analysis. The odds for young men with no knowledge increased from 3.57 (1.70, 7.49) to 3.77 (1.72, 8.24) and from 2.14 (1.06, 4.35) to 2.27 (1.09, 4.73) for young men who had low knowledge.

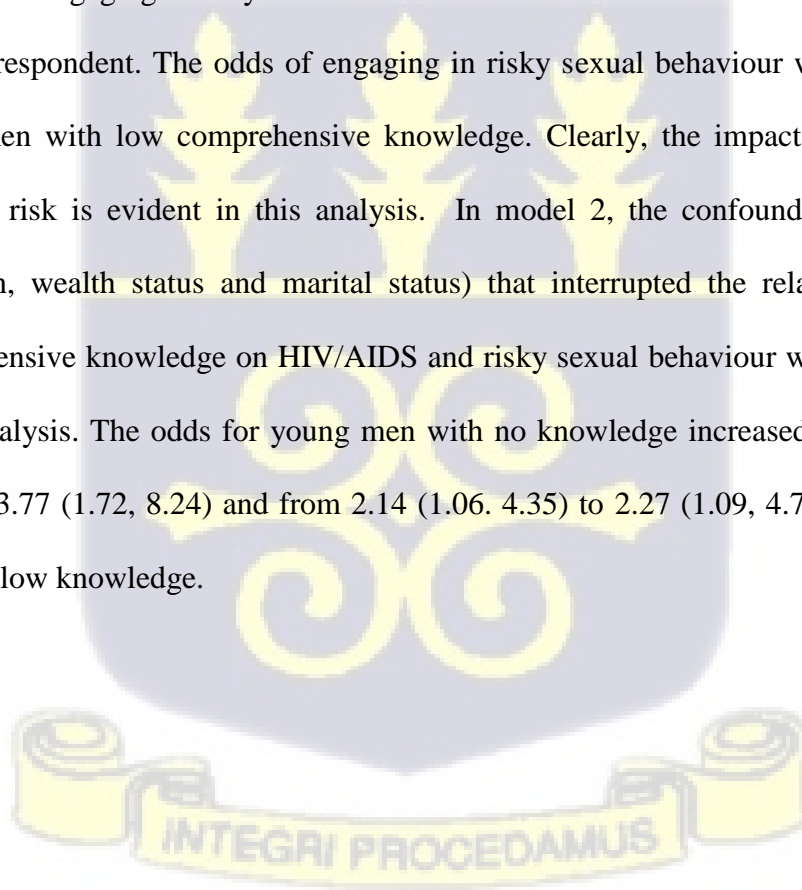


Table 3: A binary logistic regression of risky sexual behaviour and comprehensive knowledge on HIV/AIDS

Variable	Model 1 OR (95% CI)	Model 2 OR (95% CI)
Comprehensive HIV/AIDS Knowledge		
<i>No knowledge</i>	3.57 (1.70, 7.49) **	3.77 (1.72, 8.24)
<i>Low knowledge</i>	2.14 (1.06, 4.35) *	2.27 (1.09, 4.73)
<i>High knowledge</i>	1.00	1.00
Age of respondent		
<i>10-14 years</i>		0.89 (0.35, 2.27)
<i>15-19 years</i>		1.82 (0.89, 3.72)
<i>20-24 years</i>		1.00
Level of education		
<i>Primary</i>		0.44 (0.12, 1.62)
<i>Senior High</i>		0.34 (0.09, 1.25)
<i>Tertiary</i>		1.00
Wealth status		
<i>Poorest</i>		1.28 (0.46, 3.57)
<i>Poorer</i>		0.67 (0.25, 1.82)
<i>Middle</i>		1.12 (0.41, 3.04)
<i>Richer</i>		0.64 (0.24, 1.73)
<i>Richest</i>		1.00
Marital status		
<i>Single</i>		0.45 (0.12, 3.47)
<i>Married</i>		1.00
-2 log likelihood	247.37	237.10

** p -value < 0.01 * p -value < 0.05



CHAPTER FIVE

DISCUSSION

5.1 Introduction

This chapter discusses the results of the study in relation to existing empirical literature, theories and the conceptual framework that underpinned the study. The discussions will cover subtopics such as comprehensive knowledge on HIV/AIDS; sexual practices; and the effect of comprehensive HIV/AIDS knowledge in risky sexual behaviour.

5.2 Comprehensive knowledge of HIV/AIDS

Assuring that young people understand both how to avoid HIV infections and where they can safely obtain HIV prevention and sexual and reproductive health services is an important component of HIV interventions. Similarly, having accurate and high level of comprehensive HIV/AIDS knowledge is one of the major strategies to aid in the fight against HIV and AIDs pandemic. Comprehensive knowledge of HIV/AIDS among young men in the Cape Coast Metropolis was measured based on three categories. The findings indicated that 31.8% of young men had high level of comprehensive knowledge of HIV/AIDS. About thirty-four percent of young men who participated in the study did not have comprehensive knowledge of HIV/AIDS. A previous study conducted in Nigeria in 2014 highlighted significant low levels of comprehensive HIV knowledge among young adolescents (Badru et al., 2020). Again, study in Nigeria reported 34.3 % comprehensive knowledge on HIV where the males had low comprehensive knowledge of HIV compared to their female counterparts (Ajide & Balogun, 2018). The findings of the study on the low level of comprehensive HIV and AIDS knowledge are comparable to what Oljira, Berhane, and Worku (2013); Teshome, Youjie, Habte, and Mohamedkassm (2016) found in other countries (2016). The low and no comprehensive knowledge of HIV among young people

in Cape Coast Metropolis can be associated with myths and misconceptions surrounding the pandemic, individual and contextual factors (Darteh, 2019). For those who reported no and low comprehensive knowledge of HIV/AIDS, more attention should be paid to them, particularly in terms of providing full, functional sexuality education, including HIV, at both the family and school levels.

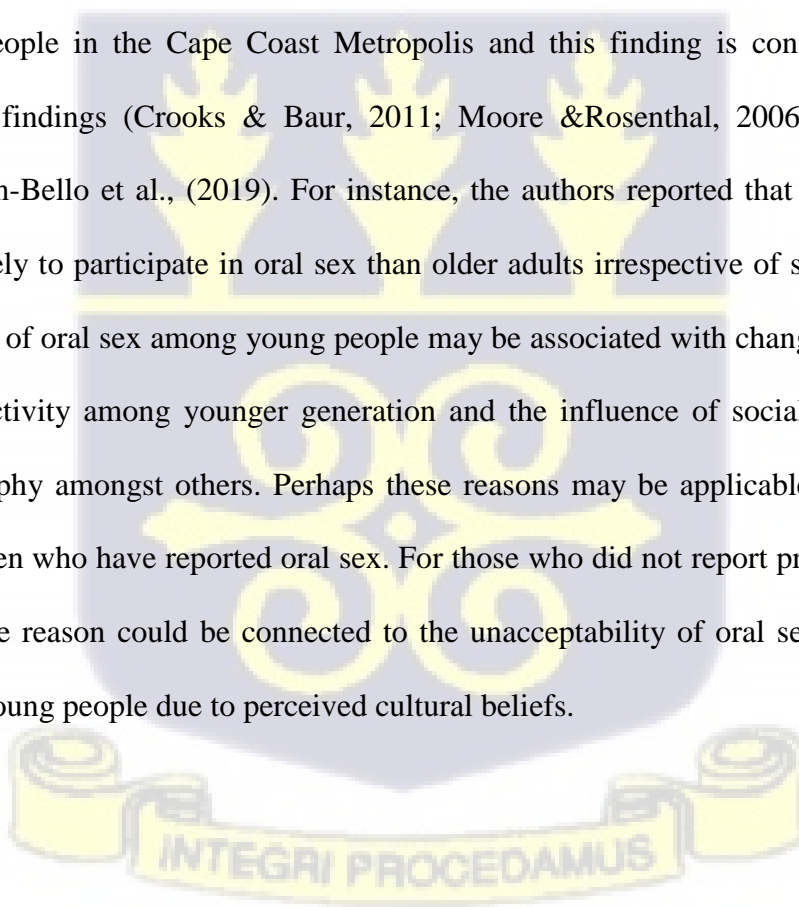
5.3 Sexual practices

Sexual intercourse is one of the sexual behaviours young people indulge themselves with as they transit from childhood to adulthood. If not done safely, it can lead to multiple adverse health outcomes for both the young boy and girl. At this same period intimate relationships are likely to begin. The finding from the current study indicates that about 62 percent of young men in the Cape Coast metropolis have ever had sexual intercourse. A similar report by the Guttmacher Institute indicated that four in 10 Ghanaian women and two in 10 men aged 15-19 have ever had sex, and by age 20, 83% of women and 56% of men have had sex (Guttmacher Institute, 2017).

The current study also found 83.6 % (comprising 21.3 % [10-14 year] and 62.3 [15-19 years]) of the respondents had their first ever sex when they were between the ages of 10-19 years. A previous study in sub-Saharan Africa reported that up to 25% of adolescents aged 15-19 years have ever had sexual intercourse before the age of 15 years, although this can vary across the countries (Shayo & Kalomo, 2019). Stephenson, Simon, and Finneran (2014) agree with the finding of the current study. For example, the authors found that the median ages at first sex in the four nations ranged from 14years in Malawi and Uganda for males to 16years in Ghana and Malawi for females. A possible reason for early sexual debut among young men can be attributed to parental involvement. For example, higher

levels of parental monitoring is associated with lower odds of early sex (Stephenson, Simon, & Finneran, 2014). Other factors that can be used to explain the early sexual debut among young men in the Cape Coast metropolis are having more advanced physical maturity, having more permissive attitudes towards sex, alcohol use, delinquency, violence, history of physical and sexual abuse and school problems (Peltzer & Pengpid, 2015). It is also important to note that early sexual debut is associated with risky sexual behaviour and HIV infections and hence, abstinence programmes are needed to be strengthened to delay sexual debut among young people.

Even though oral sex has become an increasingly acceptable sexual behaviour among youths in recent years (Martin, 2010), the current study reported a low participation among young people in the Cape Coast Metropolis and this finding is consistent with other research findings (Crooks & Baur, 2011; Moore & Rosenthal, 2006) but contrary to Morhason-Bello et al., (2019). For instance, the authors reported that young people are more likely to participate in oral sex than older adults irrespective of sex. The increased reporting of oral sex among young people may be associated with changing perception of sexual activity among younger generation and the influence of social media including pornography amongst others. Perhaps these reasons may be applicable to the 24.2% of young men who have reported oral sex. For those who did not report practice of oral sex, a possible reason could be connected to the unacceptability of oral sex being practiced among young people due to perceived cultural beliefs.



Vagina sexual intercourse was the most common sexual practice among young men in the Cape Coast Metropolis. Vaginal sex practice recorded 71.2 % among the study respondents. The most acceptable form of penetrative sexual act in the Ghana is vaginal-penile sex. The finding of the current study confirms the results of previous studies. For instance, Darteh and Nnorom (2012) established evidence of the practice of vaginal-penile sex among young people aged 10-24 years in Ghana. A plausible explanation that could be advanced for this result is align with the religious and cultural expectation of the respondents. Generally, young individuals are not expected to engage in any sexual act until rightfully and legally married. However, instance where they engage in a sexual act, they are expected to only practice vaginal sex. This reason might be a likely explanation for the high proportion of young men engaging in vaginal sex than the other sexual practices.

It is important to note that for those who have ever had sex, 26.3 % had two or more sexual partners. A study by Shayo and Kaloma (2019) also reported similar finding. That is, one-fourth of adolescents who have ever engaged in sexual intercourse had multiple sexual partners. Previous studies in sub-Saharan Africa have found a comparable prevalence of sex with multiple partners among young people, but with variation across the countries (Doyle, Mavedzenge, Plummer & Ross, 2012). A study conducted in Ghana reported that among those who have had sex, 60% aged 12–24years have had more than one sexual partner (The Alan Guttmacher Institute, 2004). Sexual intercourse, particularly with several partners, carries a high risk of HIV infection, other STIs, and teenage pregnancy. It is therefore imperative that programmes that are geared towards safer sex practices

should be targeted towards young people with multiple sexual partners as a reduction in such behaviour may contribute significantly towards the spread of HIV/AIDS.

The use of condom during sexual intercourse be it vaginal-penile and/or anal-penile sex, is very crucial in preventing STIs including HIV/AIDS and teenage pregnancy. Inconsistent condom uses during sexual intercourse, especially among men, continues to pose a serious health challenge (Maonga, Gondwe, & Machira, 2019). The current study found that 75.8 % of the total sample (198) did not use condom frequently. The non-use of condom in itself is considered as a risky sexual behaviour with multiple consequences. Similarly, the use of condoms by young men is substantially lower than that of adult men (Upreti, Regmi, Pant & Simkhada, 2009). A possible reason for this finding could be that young people do not feel confident insisting on condom use if their partner did not want to use one (The Alan Guttmacher Institute, 2004). Unsafe penetrative heterosexual sex is thus considered the major cause of HIV transmission and propagation in many developing countries (Berhan & Berhan, 2015). There is therefore the need to intensify public education and programmes that seek to promote condom use among young people who are sexually active across all ages.

Risky sexual behaviour among young people especially in Africa, is a major public health problem (Tarkang, Pencille, Amu, Komesour, & Lutala, 2019). The incidence of risky sexual behaviours among young people is regional and socially determined, and so varies greatly from one location to the other. Risky sexual behaviour is prevalent in Africa, with rates ranging from 26% to 64% (Amare, Yeneabat, & Amare, 2019; Afriyie & Essilfie, 2019; Musiime, & Mugisha, 2015). The current study found that about 64% of young men

in the Cape Coast metropolis have engaged in risky sexual behaviour which includes having multiple sexual partners, non-use of condom during sexual intercourse and the use of alcohol for sexual activities. The implication of this finding is that young people in the metropolis are highly exposed to health consequence of risky sexual behaviours such as but not limited to HIV/AIDS, sexually transmitted disease, early pregnancy, and unintended pregnancy (Geremew et al., 2020).

5.4 Effect of comprehensive knowledge of HIV on risky sexual behaviour

Despite the popular saying that knowledge does not necessarily translate into action, the findings from this research indicates that knowledge to some extent has an associative effect on the likelihood of young men engaging in risky sexual behaviour. The findings from the study indicates that those with no knowledge are more likely to engage in risky sexual behaviour as compared with those with high knowledge and this finding is consistent with Ajide and Balogun, (2018); Pharr et al., (2017). For instance, Ajide and Balogun (2018) reported that good knowledge most likely made young people to realise that the risk of contracting HIV far outweighs the benefit that may be derived from intimate relationships. Poor knowledge that was associated with the intention to engage in high-risk sexual behaviours showed that such knowledge to some extent, HIV knowledge mediate intended sexual behaviours. However, these adolescents appear not to be worried about intending to engage in risky sexual as was seen in the study where about 64% of young men in the Cape Coast metropolis have engaged in risky sexual behaviour. This calls for an urgent need to reach out to these adolescents with appropriate and effective sexual health education in order to avoid the consequences of risky sexual behaviour among them. Additionally, HIV/AIDS programme managers, higher education administrators, and

health care providers working on HIV/AIDS and sexual and reproductive health interventions should emphasise various strategies in order to improve comprehensive HIV/AIDS knowledge, which is one of the intervention's indicators, and reduce risky sexual behaviour.



CHAPTER SIX

CONCLUSION AND RECOMMENDATION

6. 1. Conclusion

About thirty-four percent of the sampled population have no comprehensive knowledge of HIV/AIDS while about 32% had high comprehensive knowledge of HIV/AIDS. Out of the 198 sampled young men in the study area, 122 representing 61.6 percent have ever had sexual intercourse. Seventy-six out of 122 reported that they had their first sexual intercourse when they were between the ages of 15-19 years.

Some common forms of sexual practices that were reported among young men in the Cape Coast metropolis were oral sex (24.2%), vaginal sex (71.0%) and multiple sexual partners (71.2%). Only 24.2 % reported to frequently use condom during sexual intercourse while non-use of condom was really high among young men (75.8%). Of the total 198 respondents that participated in the study, about 64% of them in the Cape Coast metropolis have engaged in risky sexual behaviour.

Comprehensive knowledge of HIV/AIDS had a significant association effect on risky sexual behaviour. For instance, young men who had no comprehensive knowledge had higher odds of engaging in risky sexual behaviour compared to those with high comprehensive knowledge of HIV/AIDS. Other confounders such as age, wealth, education, and marital status that either increases or decreases the relationship between comprehensive knowledge on HIV/AIDS and risky sexual behaviour were all statistically not significant.

6.2 Recommendation

Based on the findings of the study, the following recommendations are suggested for policy as well as for further research.

1. From the study, young men who had no comprehensive knowledge and low comprehensive knowledge of HIV/AIDS were 33.8 % and 34.3 % respectively. This makes a sum of 68.1 % young people who need community or school-based programmes that provides education of HIV and other STIs, delayed sexual debut, condom use and any misconceptions about HIV/AIDS.
2. One of the most important findings was that having a thorough understanding of HIV is linked to risky sexual behaviour. That is, young people who are unaware of the consequences of their actions are more likely to engage in dangerous sexual behaviour. As a result, educational institutions and the Ghana Education Service (GES), the media, and other HIV prevention programme partners (National HIV/AIDS Control Programme, Ghana Health Service, Ghana AIDS Commission etc.) in the Cape Coast Metropolis must collaborate and intensify HIV education on condom use, multiple sexual partners, and oral sex among young males.
3. Further qualitative research might be conducted to explore why some young males in the Cape Coast metropolitan engage in risky sexual behaviours such as oral sex, having many sexual partners, and having sexual intercourse without the use of a condom, all of which increase the risk of HIV infection.

REFERENCES

- Abdul-Rahman, L., Marrone, G., & Johansson, A. (2011). Trends in contraceptive use among female adolescents in Ghana. *African Journal of Reproductive Health, 15*(2).
- Agegehu, C. D., & Tesema, G. A. (2020). Effect of mass media on comprehensive knowledge of HIV/AIDS and its spatial distribution among reproductive-age women in Ethiopia: a spatial and multilevel analysis. *BMC public health, 20*(1), 1-12.
- Ajayi AI, Okeke SR. Protective sexual behaviours among young adults in Nigeria: influence of family support and living with both parents. *BMC Public Health. 2019 Jul 23;19*(1):983. doi: 10.1186/s12889-019-7310-3. PMID: 3133738 3; PMCID: PMC6651974.
- Ajide, K. B., & Balogun, F. M. (2018). Knowledge of HIV and intention to engage in risky sexual behaviour and practices among senior school adolescents in Ibadan, Nigeria. *Archives of basic and applied medicine, 6*(1), 3.
- Amare, T., Yeneabat, T., & Amare, Y. (2019). A systematic review and meta-analysis of epidemiology of risky sexual behaviors in college and university students in Ethiopia, 2018. *Journal of environmental and public health, 2019*.
- Amo-Adjei, J., & Tuoyire, D. A. (2018). Timing of sexual debut among unmarried youths aged 15–24 years in sub-Saharan Africa. *Journal of biosocial science, 50*(2), 161-177.
- Amoateng, Y. (2019). South Africa's Youth: A Deficit or Dividend?

- Asare, B. Y. A., Aryee, S. E., & Kotoh, A. M. (2020). Sexual behaviour and the utilization of youth friendly health Services: A cross-sectional study among urban youth in Ghana. *International Journal of Africa Nursing Sciences*, *13*, 100250.
- Awolugutu, C. A. (2018). *Parenting and Adolescents' Adoption of Risky Sexual Behaviours in Awutu Senya East Municipality of the Central Region of Ghana* (Master of Public Health dissertation, University Of Ghana).
- Badru, T., Mwaisaka, J., Khamofu, H., Agbakwuru, C., Adedokun, O., Pandey, S. R., ... & Torpey, K. (2020). HIV comprehensive knowledge and prevalence among young adolescents in Nigeria: evidence from Akwa Ibom AIDS indicator survey, 2017. *BMC Public Health*, *20*(1), 1-10.
- Beksinska, M., Wong, R., & Smit, J. (2020). Male and female condoms: Their key role in pregnancy and STI/HIV prevention. *Best Practice & Research Clinical Obstetrics & Gynaecology*, *66*, 55-67.
- Bingenheimer, J. B., & Stoebenau, K. (2016). The relationship context of adolescent fertility in southeastern Ghana. *International perspectives on sexual and reproductive health*, *42*(1), 1-12.
- Biressaw, W., Tilaye, H., & Melese, D. (2021). Clustering of HIV Patients in Ethiopia. *HIV/AIDS (Auckland, NZ)*, *13*, 581.
- Blashill, A. J., Bedoya, C. A., Mayer, K. H., O'Cleirigh, C., Pinkston, M. M., Remmert, J. E., ... & Safren, S. A. (2015). Psychosocial syndemics are additively associated with worse ART adherence in HIV-infected individuals. *AIDS and Behavior*, *19*(6), 981-986.

- Boisvert, I., Boislard, M. A., & Poulin, F. (2017). Early sexual onset and alcohol use and misuse from adolescence into young adulthood. *Journal of Adolescent Health, 61*(4), 514-520.
- Chakalisa, Unoda, Wirth, Kathleen, Bennett, Kara, Kadima, Etienne, Manyake, Kutlo, Gaolathe, Tendani, Bachanas, Pam, Marukutira, Tafireyi, Lebelonyane, Refeletswe, Dryden-Peterson, Scott, Butler, Lisa, Mmalane, Mompoti, Makhema, Joseph, Roland, Michelle E., Pretorius-Holme, Molly, Essex, Max, Lockman, Shahin, & Powis, Kathleen M.. (2019). Self-reported risky sexual practices among adolescents and young adults in Botswana. *Southern African Journal of HIV Medicine, 20*(1), 1-8. <https://dx.doi.org/10.4102/sajhivmed.v20i1.899>
- Chandra-Mouli, V., Svanemyr, J., Amin, A., Fogstad, H., Say, L., Girard, F., & Temmerman, M. (2015). Twenty years after International Conference on Population and Development: where are we with adolescent sexual and reproductive health and rights? *Journal of Adolescent Health, 56*(1), S1-S6.
- Cleland, J., & Ali, M. M. (2006). Sexual abstinence, contraception, and condom use by young African women: a secondary analysis of survey data. *The Lancet, 368*(9549), 1788-1793.
- Darteh, E. K. (2020). Individual and contextual predictors of comprehensive HIV and AIDS knowledge among young females in Ghana. *African Journal of AIDS Research, 19*(3), 222-230.
- Darteh, E. K. M., Dickson, K. S., & Amu, H. (2020). Understanding the socio-demographic factors surrounding young peoples' risky sexual behaviour in Ghana and Kenya. *Journal of community health, 45*(1), 141-147.

- Darteh, E. K. M., Dickson, K. S., & Doku, D. T. (2019). Women's reproductive health decision-making: A multi-country analysis of demographic and health surveys in sub-Saharan Africa. *PloS one*, *14*(1), e0209985.
- Darteh, E., & Nnorom, C. C. (2012). Sexual behaviour and condom use among adolescents living in urban poor areas in the Brong Ahafo Region, Ghana. *Journal of Alternative perspectives in the Social Sciences*, *4*(3), 619-639.
- Darteh, E., & Nnorom, C. C. (2012). Sexual behaviour and condom use among adolescents living in urban poor areas in the Brong Ahafo Region, Ghana. *Journal of Alternative perspectives in the Social Sciences*, *4*(3), 619-639.
- De Wet, N., Akinyemi, J., & Odimegwu, C. (2019). How much do they know? An analysis of the accuracy of HIV knowledge among youth affected by HIV in South Africa. *Journal of the International Association of Providers of AIDS Care (JIAPAC)*, *18*, 2325958218822306.
- Dickson, K. S., Adde, K. S., & Ameyaw, E. K. (2021). Women empowerment and skilled birth attendance in sub-Saharan Africa: A multi-country analysis. *Plos one*, *16*(7), e0254281.
- Dickson, K. S., Ameyaw, E. K., & Darteh, E. K. M. (2020). Understanding the endorsement of wife beating in Ghana: evidence of the 2014 Ghana demographic and health survey. *BMC women's health*, *20*(1), 1-7.
- Dickson, K. S., Seidu, A. A., Adde, K. S., Okyere, J., Commey, F., Akpeke, M., ... & Ahinkorah, B. O. (2021). Does Having Comprehensive HIV and AIDS Knowledge Affect the Risky Sexual Behaviour of Young People in Sub-Saharan Africa: Pooled Analysis of Demographic and Health Surveys. *Effective are Control Strategies? Int. J. Environ. Res. Public Health*, *5*(5) 378-383

- Elbadawi, A., & Mirghani, H. (2016). Assessment of HIV/AIDS comprehensive correct knowledge among Sudanese university: A cross-sectional analytic study 2014. *Pan African Medical Journal*, 24(1).
- F. Amoateng, I. Kalule-Sabiti, J. Arkaah. "The effect of socio-demographic factors on risky- sexual behaviours of adolescents in the north west province of South Africa," *African Population Studies*, Vol. 28, No. 1, pp.487-499, 2014.
- Falb, K. L., Annan, J., Kpebo, D., Cole, H., Willie, T., Xuan, Z., ... & Gupta, J. (2015). Differential impacts of an intimate partner violence prevention program based on child marriage status in rural Côte d'Ivoire. *Journal of Adolescent Health*, 57(5), 553-558.
- Fenny, A. P., Crentsil, A. O., & Asuman, D. (2017). Determinants and distribution of comprehensive HIV/AIDS knowledge in Ghana. *Glob J Health Sci*, 9(12), 32. [files/media asset/un aids-data-2018_en.pdf](#). .
- Gambadauro, P., Carli, V., Hadlaczky, G., Sarchiapone, M., Apter, A., Balazs, J., ... & Wasserman, D. (2018). Correlates of sexual initiation among European adolescents. *PloS one*, 13(2), e0191451.
- Geremew, A. B., Gelagay, A. A., Yeshita, H. Y., Azale Bisetegn, T., Habitu, Y. A., Abebe, S. M., & Birru, E. M. (2022). Youth Risky Sexual Behavior: Prevalence and Socio-Demographic Factors in North-West Ethiopia: A Community-Based Cross-Sectional Study. *Community Health Equity Research & Policy*, 42(2), 145-154.
- Ghana Statistical Service. Ghana DHS, 2014 - Final Report-DHS Program, ICF International, Rockville, Maryland, USA. 2015.
- UNAIDS. Global HIV? AIDS statistics—2018 fact sheet. UNAIDS 2019. UNAIDS website un aids.org/en/resources/fact-sheet Accessed November.

- UNAIDS 2020. Global HIV/AIDS 2020 fact sheet AIDS statistics–2020 fact sheet. UNAIDS.URL:http://www.unaids.org/sites/default/files/media_asset/UNAIDS_FactSheet_ru.pdf.
- UNAIDS 2021. Global HIV/AIDS Statistics —2021 fact sheet [<https://www.unaids.org/en/resources/fact-sheet>].
- Guure, C., Owusu, S., Dery, S., da-Costa Vroom, F. B., & Afagbedzi, S. (2020). Comprehensive Knowledge of HIV and AIDS among Ghanaian Adults from 1998 to 2014: A Multilevel Logistic Regression Model Approach. *Scientifica*, 2020.
- Ha, T., Schensul, S. L., Irving, M., Brault, M. A., Schensul, J. J., Prabhughate, P., & Vaz, M. (2019). Depression among alcohol consuming, HIV positive men on ART treatment in India. *AIDS and Behavior*, 23(6), 1623-1633.
- WHO/UNAIDS 2020 .HIV/AIDS [fact sheet].2020. Available from: <https://www.who.int/news-room/fact-sheets/detail/hiv-aids>. Accessed August23, 2021.
- Ishida, K., Stupp, P., & McDonald, O. (2011). Prevalence and correlates of sexual risk behaviors among Jamaican adolescents. *International perspectives on sexual and reproductive health*, 6-15.
- Kangmennaang, J., Mkandawire, P., & Luginaah, I. (2019). Determinants of risky sexual behaviours among adolescents in Central African Republic, Eswatini and Ghana: evidence from multi-indicator cluster surveys. *African Journal of AIDS Research*, 18(1), 38-50.
- Krugu, J. K., Mevissen, F., Munkel, M., & Ruiter, R. (2017). Beyond love: a qualitative analysis of factors associated with teenage pregnancy among young women with pregnancy experience in Bolgatanga, Ghana. *Culture, health & sexuality*, 19(3), 293-307.

- Letamo, G., & Mokgathe, L. L. (2013). Predictors of risky sexual behaviour among young people in the era of HIV/AIDS: evidence from the 2008 Botswana AIDS Impact Survey III. *African journal of reproductive health*, 17(3), 169-181.
- Liang, M., Simelane, S., Fillo, G. F., Chalasani, S., Weny, K., Canelos, P. S., ... & Snow, R. (2019). The state of adolescent sexual and reproductive health. *Journal of Adolescent Health*, 65(6), S3-S15.
- Lohman, B. J., & Billings, A. (2008). Protective and risk factors associated with adolescent boys' early sexual debut and risky sexual behaviors. *Journal of youth and adolescence*, 37(6), 723-735.
- López, J. D., Shacham, E., & Brown, T. (2018). The impact of the Ryan White HIV/AIDS medical case management program on HIV clinical outcomes: a longitudinal study. *AIDS and Behavior*, 22(9), 3091-3099.
- Maonga, B. B., Gondwe, T. S., & Machira, K. (2018). Determinants of risky sexual behavior among the youth in Malawi. ICF.
- Mbanya, D., Sama, M. & Tchounwou, P. (2018). Current Status of HIV/AIDS in Cameroon: How
- Mbuthia, G., Wanzala, P., Ngugi, C., & Nyamogoba, H. D. N. (2019). Patterns of risky sexual behavior and associated factors among undergraduates in the Coastal region of Kenya. *African Journal of Health Sciences*, 32(3), 16-26.
- Medley, A., Kennedy, C., O'Reilly, K., & Sweat, M. (2009). Effectiveness of peer education interventions for HIV prevention in developing countries: a systematic review and meta-analysis. *AIDS Education and Prevention*, 21(3), 181-206.

- Morales, A., Garcia-Montaña, E., Barrios-Ortega, C., Niebles-Charris, J., Garcia-Roncallo, P., Abello-Luque, D., ... & Martínez, O. (2019). Adaptation of an effective school-based sexual health promotion program for youth in Colombia. *Social Science & Medicine*, 222, 207-215.
- Muche, A. A., Kassa, G. M., Berhe, A. K., & Fekadu, G. A. (2017). Prevalence and determinants of risky sexual practice in Ethiopia: Systematic review and Meta-analysis. *Reproductive health*, 14(1), 1-11.
- Mudhovozi, P. (2011). Unsafe sexual behavior, reasons for consequences and preventive methods among college students. *Journal of Psychology in Africa*, 21(4), 573-575.
- National AIDS and STI Control Programme (NAS COP). Preliminary KENPHIA 2018 Report. Nairobi: NAS COP, 2020.
- National AIDS/STI Control Programme. Ghana NACP Annual Report, 2019: National AIDS/STI Control Programme, Ghana; 2020.
- Nwondah, C., & Alabere, I. (2018). Risky Sexual behaviours among youths in selected communities in Obio-Akpor and Ikwerre Local Government Areas of Rivers State, Nigeria. *Journal of Advances in Medical and Pharmaceutical Sciences*, 19, 1-9.
- Odimegwu, C., Somefun, O. D., & Chisumpa, V. H. (2019). Regional differences in positive sexual behaviour among youth in sub-Saharan Africa. *Journal of biosocial science*, 51(2), 254-272.
- Oginni, O. A., Mapayi, B. M., Afolabi, O. T., Ebuenyi, I. D., Akinsulore, A., & Mosaku, K. S. (2019). Association between risky sexual behavior and a psychosocial syndemic among Nigerian men who have sex with men. *Journal of Gay & Lesbian Mental Health*, 23(2), 168-185.

- Olesen, T. B., Jensen, K. E., Nygård, M., Tryggvadottir, L., Sparén, P., Hansen, B. T., ... & Kjær, S. K. (2012). Young age at first intercourse and risk-taking behaviours—a study of nearly 65 000 women in four Nordic countries. *The European Journal of Public Health*, 22(2), 220-224.
- Olorunsola, A. M., Muyibi, S. A., Irabor, A. E., Adetunji, A. A., Ismail, W. O., & Ogunniyan, T. (2021). Pattern and predictors of sexual behaviour among adolescents in Ibadan, South West, Nigeria. *Archives of Community Medicine and Public Health*, 7(2), 175-181.
- Palomino González R, Kadengye DT, Mayega RW. The knowledge-risk-behaviour continuum among young Ugandans: what it tells us about SRH/HIV integration. *BMC Public Health*. 2019 May 29;19(Suppl 1):604. doi: 10.1186/s12889-019-6809-y. PMID: 31138182; PMCID: PMC6538546.
- Pharr, R., Victor, J., Mavegam, B.O., Olutola, A., Karick, H., & Ezeanolue, E. (2017). A Cross- Sectional Study of the Role of HIV/AIDS Knowledge in Risky Sexual Behaviors of Adolescents in Nigeria. *International Journal of High Risk Behaviors & Addiction*, 6(4), e63203. doi:10.5812/ijhrba.63203
- Sachs, J., Schmidt-Traub, G., Kroll, C., Lafortune, G., Fuller, G. (2018): *SDG Index and Dashboards Report 2018*. New York: Bertelsmann Stiftung and Sustainable Development Solutions Network (SDSN).
- Sahile, Z., Mekuria, M., & Yared, A. (2015). Comprehensive HIV/AIDS knowledge and sexual behavior among university students in Ambo, central Ethiopia: Implication to improve intervention. *Journal of sexually transmitted diseases*, 2015.
- Sahile, Z., Mekuria, M., & Yared, A. (2015). Comprehensive HIV/AIDS knowledge and sexual behavior among university students in Ambo, central Ethiopia: Implication to improve intervention. *Journal of sexually transmitted diseases*, 2015.

- Sanders, S. A., Yarber, W. L., Kaufman, E. L., Crosby, R. A., Graham, C. A., & Milhausen, R. R. (2012). Condom use errors and problems: a global view. *Sexual health*, 9(1), 81-95.
- Seidu, A. A., Amu, H., Dadzie, L. K., Amoah, A., Ahinkorah, B. O., Ameyaw, E. K., ... & Kissah-Korsah, K. (2020). Suicidal behaviours among in-school adolescents in Mozambique: Cross-sectional evidence of the prevalence and predictors using the Global School-Based Health Survey data. *PloS one*, 15(7), e0236448.
- Simoni, J. M., Nelson, K. M., Franks, J. C., Yard, S. S., & Lehavot, K. (2011). Are peer interventions for HIV efficacious? A systematic review. *AIDS and Behavior*, 15(8), 1589-1595.
- Srahbzu, M., & Tirfeneh, E. (2020). Risky Sexual Behavior and Associated Factors among Adolescents Aged 15-19 Years at Governmental High Schools in Aksum Town, Tigray, Ethiopia, 2019: An Institution-Based, Cross-Sectional Study. *BioMed Research International*, 2020.
- Srahbzu, M., & Tirfeneh, E. (2020). Risky Sexual Behavior and Associated Factors among Adolescents Aged 15-19 Years at Governmental High Schools in Aksum Town, Tigray, Ethiopia, 2019: An Institution-Based, Cross-Sectional Study. *BioMed Research International*, 2020.
- Ssewamala, F. M., Karimli, L., Torsten, N., Wang, J. S. H., Han, C. K., Ilic, V., & Nabunya, P. (2016). Applying a family-level economic strengthening intervention to improve education and health-related outcomes of school-going AIDS-orphaned children: lessons from a randomized experiment in Southern Uganda. *Prevention Science*, 17(1), 134-143.

- Tadesse, S. K. (2015). Socio-economic and cultural vulnerabilities to cervical cancer and challenges faced by patients attending care at Tikur Anbessa Hospital: a cross sectional and qualitative study. *BMC women's health*, 15(1), 1-12.
- Teferra, T. B., Erena, A. N., & Kebede, A. (2015). Prevalence of premarital sexual practice and associated factors among undergraduate health science students of Madawalabu University, Bale Goba, South East Ethiopia: institution based cross sectional study. *Pan African medical journal*, 20(1).
- UNAIDS ['AIDSinfo'](#) (accessed August 2021)
- UNAIDS. HIV Data and Estimates. Geneva: UNAIDS; 2018.
- UNAIDS. Miles to go: closing gaps, breaking barriers, righting injustices. Geneva: Joint United Nations Programme on HIV/AIDS; 2018
- UNAIDS. UNAIDS DATA 2018. 2018. <http://www.unaids.org/sites/default/>
- Valadez, J. J., Jeffery, C., Davis, R., Ouma, J., Lwanga, S. K., & Moxon, S. (2014). Putting the C back into the ABCs: a multi-year, multi-region investigation of condom use by Ugandan youths 2003–2010. *PLoS One*, 9(4), e93083.
- Wakasa, B. F., Oljira, L., Demena, M., Regassa, L. D., & Daga, W. B. (2021). Risky sexual behavior and associated factors among sexually experienced secondary school students in Guduru, Ethiopia. *Preventive Medicine Reports*, 23, 101398.
- Watsi, L., & Tarkang, E. E. (2020). Demographic determinants of risky sexual behaviours among senior high school students in the Hohoe Municipality, Ghana. *PAMJ-Clinical Medicine*, 2(81).

Widman, L., Noar, S. M., Choukas-Bradley, S., & Francis, D. B. (2014). Adolescent sexual health communication and condom use: a meta-analysis. *Health Psychology, 33*(10), 1113.

Woldeamanue, B. T. (2020). Risky sexual behavior and associated factors among high school adolescents in North Shewa zone, Oromia Region, Ethiopia. *PAMJ-One Health, 2*(18).

World Health Organization. (2018). Guidelines for the diagnosis, prevention and management of cryptococcal disease in HIV-infected adults, adolescents and children. In *Guidelines for the diagnosis, prevention and management of cryptococcal disease in HIV-infected adults, adolescents and children* (pp. 1-65).



APPENDICES

APPENDIX I QUESTIONNAIRE

Questionnaire on Effect of Comprehensive HIV/AIDS Knowledge on Risky Sexual Behaviour of Young men in Cape Coast Metropolis

Respondent's ID.....

Date of Interview: __/__/__

(Please tick (✓) the appropriate option for each of the questions or write the appropriate answer in the space provided.)

SECTION A: DEMOGRAPHIC CHARACTERISTICS

1. Age

(a). 10-14 years ()

(b). 15-19 years ()

(c). 20-24 years ()

2. Marital Status

(a). Single ()

(b). Married ()

(c). Divorce ()

(d). Widowed ()

3. Religious Affiliation

(a). Christian ()

(b). Muslim ()

(c). Traditionalist ()

(d). If other, please specify:.....

4. Level of Education

- (a). Basic Education ()
- (b). SHS ()
- (c). Tertiary ()
- (d) None ()

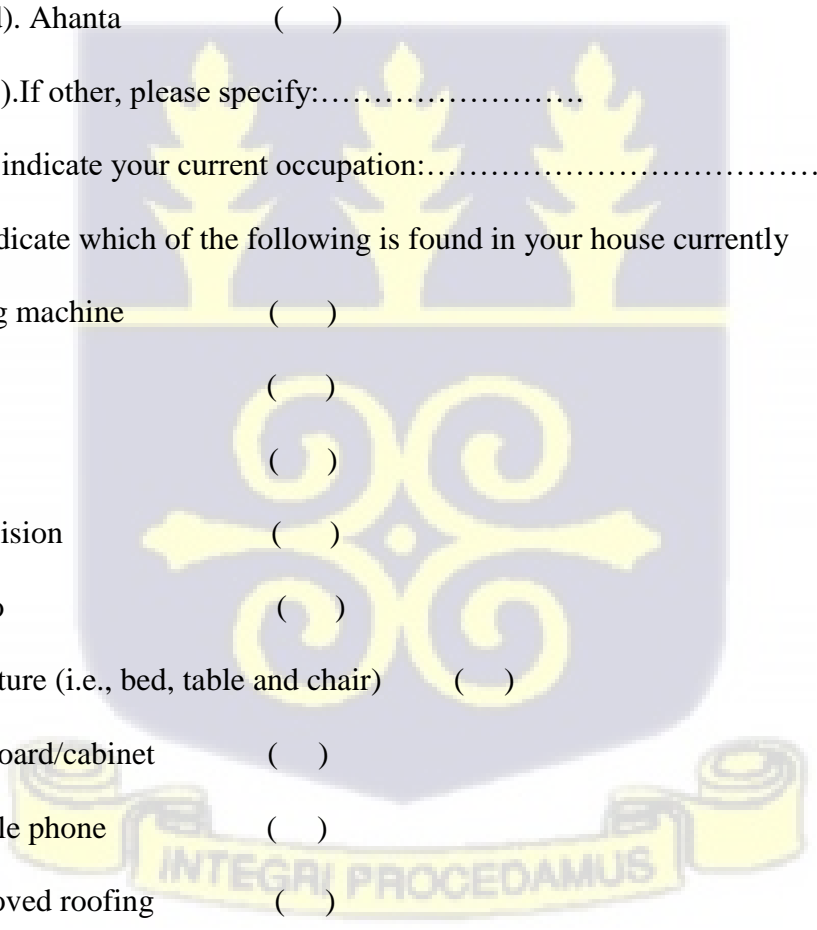
5. What is your ethnicity?

- (a). Fanti ()
- (b). Ga ()
- (c). Ashanti ()
- (d). Ahanta ()
- (e).If other, please specify:.....

6. Please indicate your current occupation:.....

Please indicate which of the following is found in your house currently

- 7. Sewing machine ()
- 8. Sofa ()
- 9. Clock ()
- 10. Television ()
- 11. Radio ()
- 11. Furniture (i.e., bed, table and chair) ()
- 12. Cupboard/cabinet ()
- 13. Mobile phone ()
- 14. Improved roofing ()



16. Improved floor ()
17. Motorised vehicle ()
18. How often do you attend religious service?
- (a). daily ()
 - (b). once a week ()
 - (c). once a month ()
 - (d).once a year ()
 - (e). never ()

19. Whom do you live?
- (a). both parent ()
 - (b). mother ()
 - (c). father ()
 - (d). alone ()
 - (e). Others specify.....

SECTION B: KNOWLEDGE LEVEL ON COMPREHENSIVE HIV/AIDS AMONG YOUNG MEN

Key: SA=Strongly Agree, A=Agree, D=Disagree, SD=Strongly Disagree

Statement	SA	A	D	SD
1. Abstaining from sexual intercourse can help prevent HIV				
2. Consistent and correct use of condom can help prevent HIV				
3. Limiting sexual partners can help prevent HIV				
4. Sharing food with an infected person can cause HIV				
5. Mosquitoes can transmit HIV				

SECTION C: SEXUAL PRACTICES AMONG YOUNG MEN

1. Have you ever been in a relationship?
1. Yes [] 2. No []
2. Have you ever had sex?
1. Yes [] 2. No []
3. At what age bracket did you have your first sex?
(a). 10-14 years ()
(b). 15-19 years ()
(c). 20-24 years ()
4. How old was the person you had sex with during your first sex?
(a).....
(b). don't know ()
5. Do you have a sexual partner now?
1. Yes [] 2. No []
6. How old is your current partner?
(a).
(b). don't know ()
7. Have you ever received anything from someone in exchange for having sex with him/her?
1. Yes [] 2. No []
8. Were you forced to have sex during your first sexual intercourse?
1. Yes [] 2. No []
9. Which of these do you practice?
(a). anal sex
(b). oral sex
(c). vaginal



SECTION D: RISKY SEXUAL BEHAVIOUR

1. In the past 12 months (1 year), have you had sexual intercourse with anyone?

1. Yes [] 2. No []

2. If yes with how many persons have you had sexual intercourse in the past 12 months (1 year)?

.....

3. How many sexual partners do you have now?

(a) one ()

(b) Two ()

(c) More than two ()

(d) None ()

4. Did you use condom in your first sexual intercourse?

1. Yes [] 2. No []

5. Do you always use condom during sex?

1. Yes [] 2. No []

6. In case you are having sex and the condom burst, what do you do?

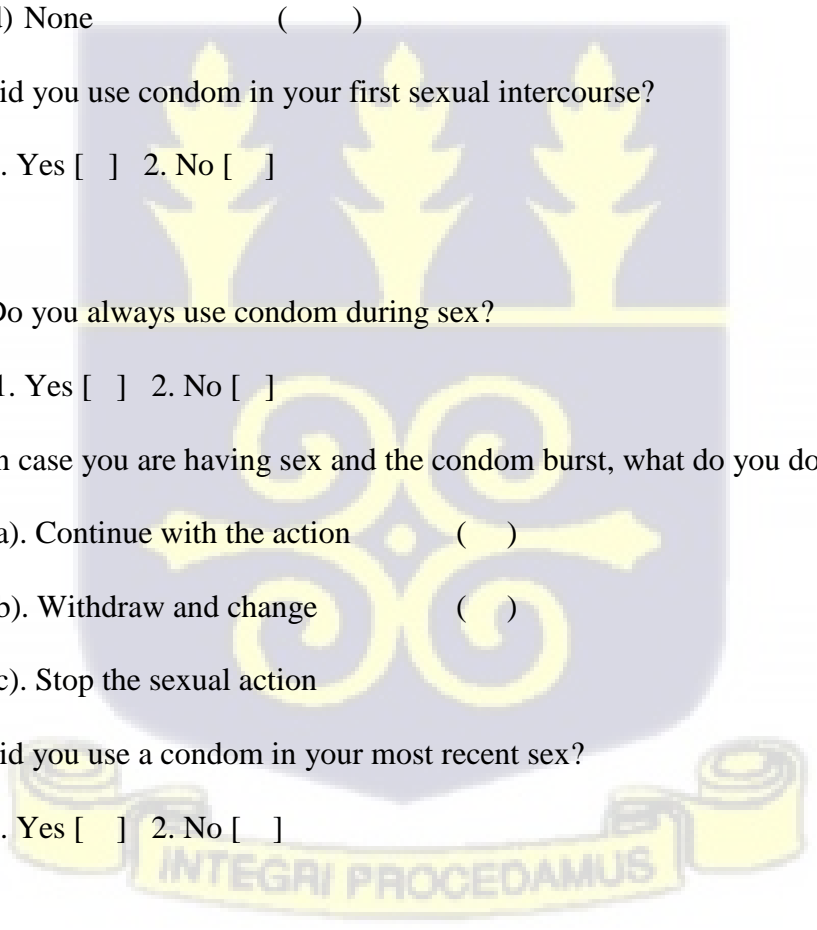
(a). Continue with the action ()

(b). Withdraw and change ()

(c). Stop the sexual action

7. Did you use a condom in your most recent sex?

1. Yes [] 2. No []



8. Do you drink alcohol before you have sexual intercourse?
- (a) Always
 - (b) Sometimes
 - (c) Never
9. Have you ever used any drug to enhance your sexual performance?
1. Yes [] 2. No []
10. If yes, what type of drug did you use?

.....



APPENNDIX II INFORMATION SHEET FOR PARENTS/GUARDIANS

Project Title: Effect of Comprehensive HIV/AIDS Knowledge on risky sexual Behaviour of Young Men in Cape Coast Metropolis

Institutional affiliation

Department of Population, Family and Reproductive Health, School of Public Health, College of Health Sciences, University of Ghana, Legon.

Background My name is Adwoa Otiwaa Ekanem (Principal Investigator).I am a student of University of Ghana, School of Public Health. I am conducting a study on effect of comprehensive HIV/AIDS knowledge on risky sexual behaviour among young men in Cape Coast Metropolis. The purpose of this study is to identify the level of knowledge on HIV/AIDS, sexual practices and risky sexual behaviour of young men in the Cape Coast Metropolis. This study is solely for academic purpose which forms part of my studies for the award of Master of Public Health.

Procedure

Your ward will be asked questions on his background; knowledge on HIV/AIDS, sexual practices and risky sexual behaviour.

Risk and benefit

There is no risk involved in this study. However, your child may be required to answer questions which maybe sensitive. The collective responses from all who answer this questionnaire are to help understand the dynamics of the sexual behaviours of young men in the Cape Coast metropolis and design appropriate intervention to promote better sexual behaviours among them.

Voluntary participation/withdrawal

Participants can choose to be in the study or not. Participation in this study is purely on voluntary basis. There will be no problem for your ward now or in the future. However, I will encourage you to consent for your child to participate in this study to add his views on the subject to help in designing appropriate interventions for safer sexual behaviours among young men.

Anonymity and Confidentiality

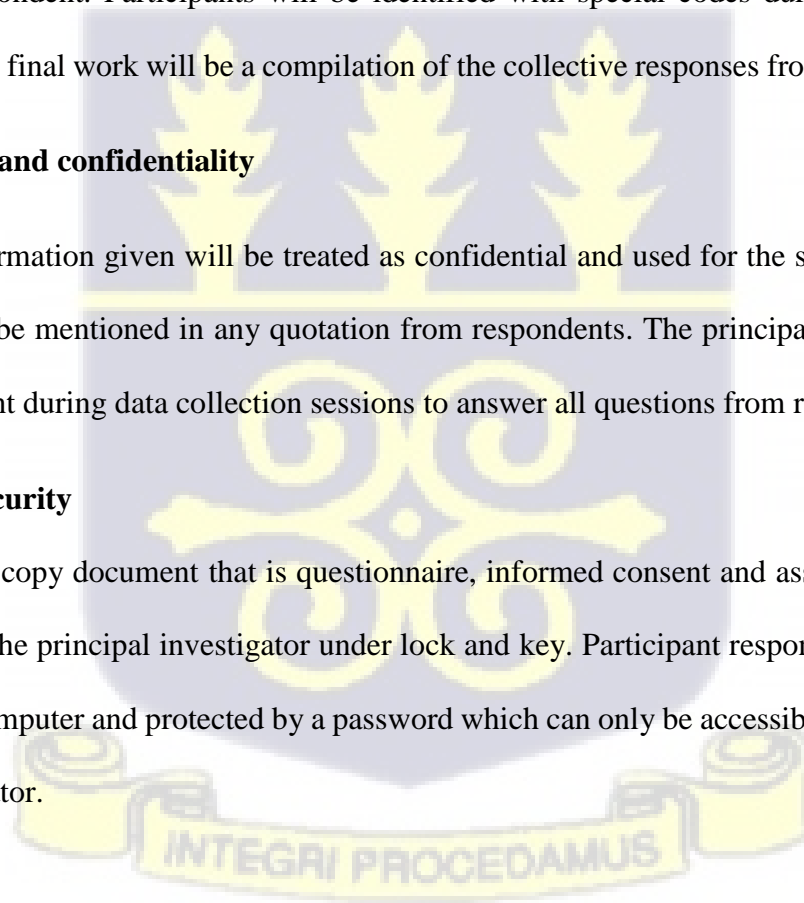
The information that you share with me will not be given to anyone; it will be used strictly for research only. There will be no names or personal details attached to this work to trace any respondent. Participants will be identified with special codes during data analysis. Also, the final work will be a compilation of the collective responses from all respondents.

Privacy and confidentiality

The information given will be treated as confidential and used for the study only. Names will not be mentioned in any quotation from respondents. The principal investigator will be present during data collection sessions to answer all questions from respondent.

Data Security

All hard copy document that is questionnaire, informed consent and assent forms will be kept by the principal investigator under lock and key. Participant responses will be keyed into a computer and protected by a password which can only be accessible by the principal investigator.



Plan for record-keeping

Questionnaires, informed consent will be coded with unique identification numbers.

The person responsible and telephone number

Data obtained from responses from respondents will be kept by Adwoa Otiwaa Ekanem, a student of the School of Public Health, University of Ghana, Legon. Tel: 0244-477734

Data storage and usage

Information obtain will be handled as confidential and solely for this study. The supervisor and the principal investigator will be the only individuals who will have access to the data.

Compensation

There will be no direct financial benefit for participating in this study.

Declaration of Conflict of interest

This study will be reviewed by the Ghana Health Service Ethics Review committee. All concerns on conflict of interest can be obtained from this committee.

Funding information

This study is self-sponsored by the principal investigator.

Contact for Additional Information

Please kindly contact this number if you have any question: (Adwoa Otiwaa Ekanem, Tel 0244-477734, adwoaekanem@gmail.com)

Your Right as a Participant

If you have any questions about your rights as a research participant, you can contact the Ghana Health Service Ethical Review Committee at the following address:

GHS-ERC Administrator,

Nana Abena Apatu

GHS-Ethics Review Committee

Research and Development Division

Ghana Health Service

P. O. Box MB 190

Accra-Ghana

Office: 233(0)243235225 / 0503539896



APPENDIX 11 PARENT CONSENT FORM FOR PARTICIPANT IN THE STUDY

TOPIC: Effect of Comprehensive HIV/AIDS Knowledge on risky sexual behaviour of Young Men in Cape Coast Metropolis

PARENT/GUARDIAN'S STATEMENT

I acknowledge that I have read the purpose and contents of the Parents' Information Sheet and all questions satisfactorily explained to me in a language I understand (English /Fante). I understand the contents and any potential implications as well as my right to change my mind (ie withdraw from the research) even after I have signed this form. I voluntarily agree to be part of this research.

Name/Initials of Parent/Guardian..... ID Code

Participants' SignatureOR Thumb Print.....

.....Date.....

INTERPRETERS' STATEMENT

I interpreted the purpose and contents of the Parents' Information Sheet to therefore named participant to the best of my ability in the ((English /Fante) language to his/her proper understanding. All questions, appropriate clarifications sort by the participant and answers were also duly interpreted to his/her satisfaction.

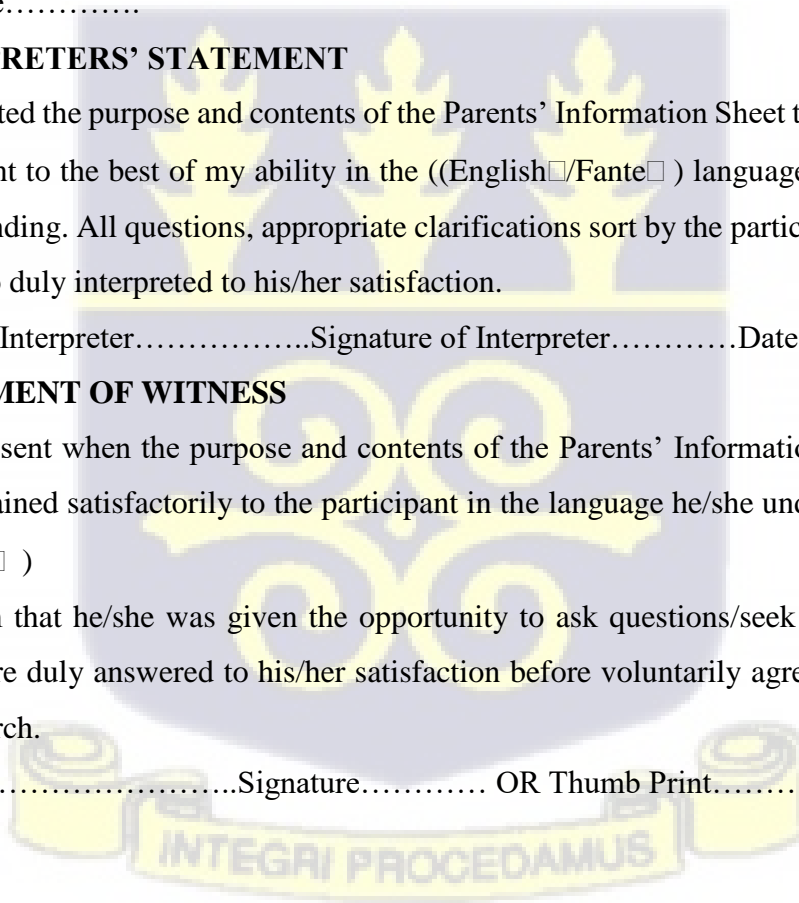
Name of Interpreter.....Signature of Interpreter.....Date:.....

STATEMENT OF WITNESS

I was present when the purpose and contents of the Parents' Information Sheet was read and explained satisfactorily to the participant in the language he/she understood ((English /Fante)

I confirm that he/she was given the opportunity to ask questions/seek clarifications and same were duly answered to his/her satisfaction before voluntarily agreeing to be part of the research.

Name:.....Signature..... OR Thumb Print.....Date:.....



INVESTIGATOR STATEMENT AND SIGNATURE

I certify that the participant has been given ample time to read and learn about the study.

All questions and clarifications raised by the participant have been addressed.

Researcher's name.....SignatureDate.....

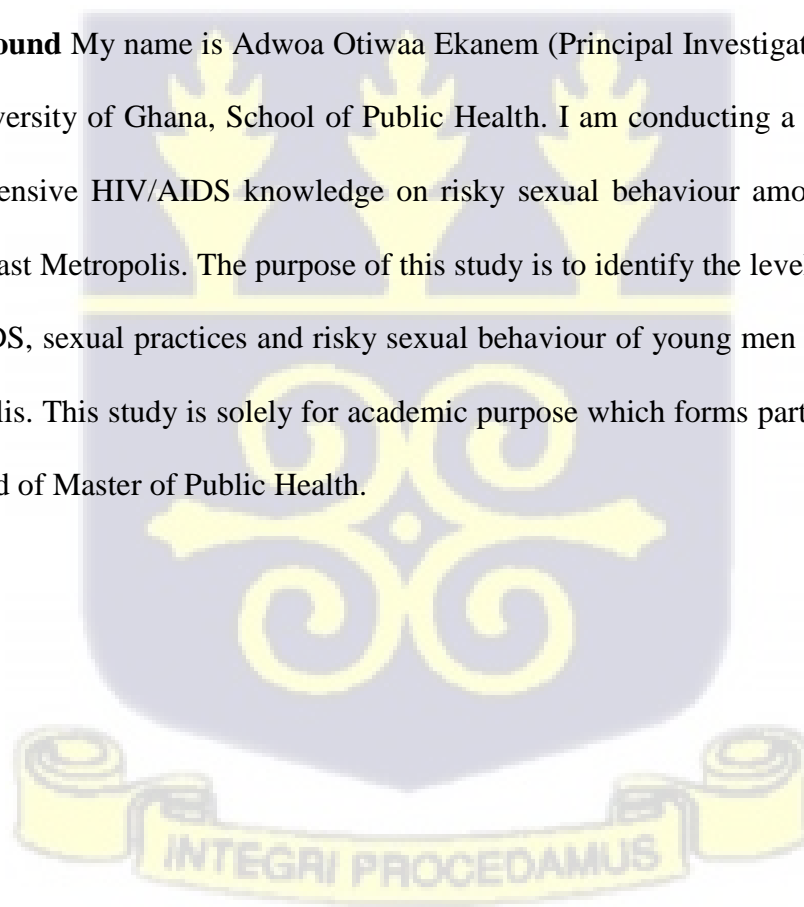
INFORMATION SHEET FOR CHILD

Project Title: Effect of Comprehensive HIV/AIDS Knowledge on Risky Sexual Behaviour of Young Men in Cape Coast Metropolis

Institutional affiliation

Department of Population, Family and Reproductive Health, School of Public Health, College of Health Sciences, University of Ghana, Legon.

Background My name is Adwoa Otiwaa Ekanem (Principal Investigator). I am a student of University of Ghana, School of Public Health. I am conducting a study on effect of comprehensive HIV/AIDS knowledge on risky sexual behaviour among young men in Cape Coast Metropolis. The purpose of this study is to identify the level of knowledge on HIV/AIDS, sexual practices and risky sexual behaviour of young men in the Cape Coast Metropolis. This study is solely for academic purpose which forms part of my studies for the award of Master of Public Health.



Procedure

You will be asked questions on your background; HIV/AIDS, sexual practices and the number of sexual partners. You will be given a questionnaire to complete by yourself or assisted to do so if required.

Risk and benefit

There is no risk involved in this study. However, you may be required to answer questions which may be sensitive. The collective response from all who answer this questionnaire is to help understand the dynamics of the sexual practices of young men in the Cape Coast metropolis and design appropriate intervention to promote better sexual practices among them.

Right to refuse

Participation in this study is purely on voluntary basis. There will be no problem for you now or in the future if you choose not participate in this research. You have the right to withdraw from the study at any time. However, I will encourage you to participate in this study to add your views on the subject to help in designing appropriate interventions for safer sexual practices among young men.

Anonymity and Confidentiality

The information that you share with me will not be given to anyone; it will be used strictly for research only. There will be no names or personal details attached to this work to trace any respondent. Participants will be identified with special codes during data analysis. Also, the final work will be a compilation of the collective responses from all respondents.

Data Security

All hard copy document that is the questionnaire, informed consent and assent forms will be kept by the principal investigator under lock and key. Participant responses will be keyed into a computer and protected by a password which can only be accessed by the principal investigator.

Plan for record-keeping

Questionnaires, informed consent will be coded with unique identification numbers.

The person responsible and telephone number

Data obtained from respondents will be kept by Adwoa Otiwaa Ekanem, a student of the School of Public Health, University of Ghana, Legon. Tel: 0244-477734

Data storage for security

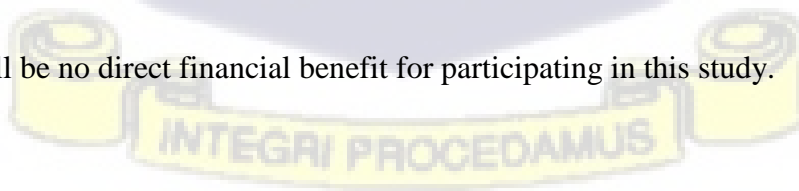
All materials used for this study will stored in a locked cabinet in the principal investigator's home.

Who will have access to the data

Data from the study will only be available to the principal investigator and the research assistants.

Compensation

There will be no direct financial benefit for participating in this study.



Declaration of Conflict of interest

This study will be reviewed by the Ghana Health Service Ethics Review committee. All concerns on conflict of interest can be obtained from this committee.

Funding information

This study is self-sponsored by the principal investigator

Contact for Additional Information

Please kindly contact this number if you have any question :(Adwoa Otiwaa Ekanem, Tel 0244-477734, adwoaekanem@gmail.com)

Your Right as a Participant

If you have any questions about your rights as a research participant, you can contact the Ghana Health Service Ethical Review Committee at the following address:

GHS-ERC Administrator,

Nana Abena Apatu

GHS-Ethics Review Committee

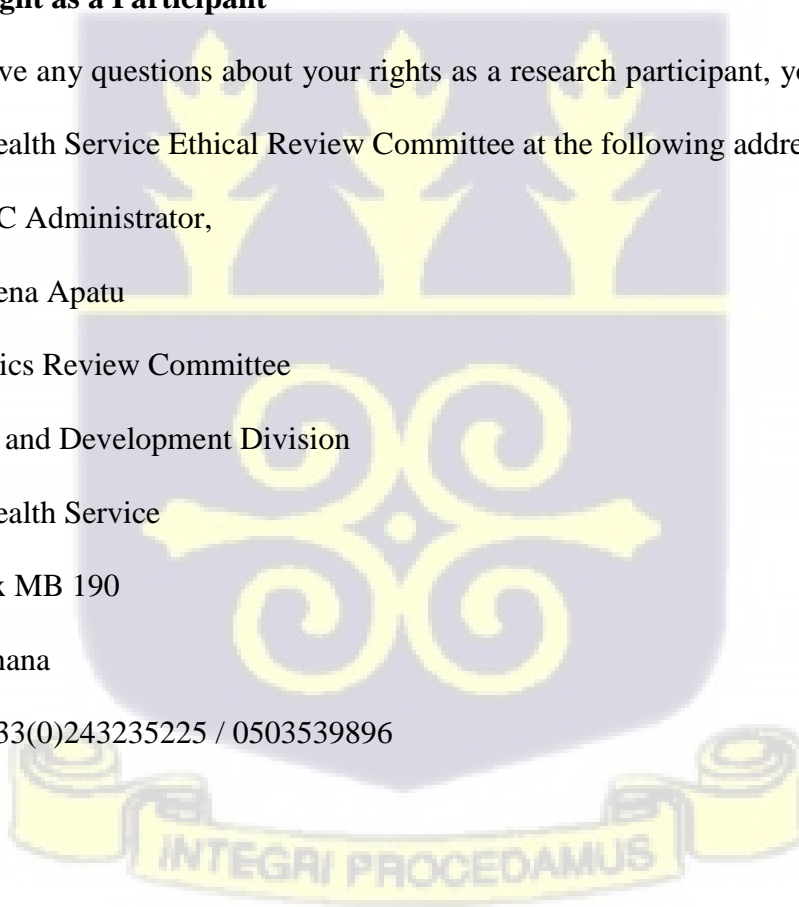
Research and Development Division

Ghana Health Service

P. O. Box MB 190

Accra-Ghana

Office: 233(0)243235225 / 0503539896



APPENDIX IV: CHILD ASSENT FORM IN THE STUDY
TOPIC: Effect of Comprehensive HIV/AIDS Knowledge on Risky Sexual Behaviour
of Young Men in Cape Coast Metropolis

PARTICIPANT’S STATEMENT

I acknowledge that I have read the purpose and contents of the Participants’ Information Sheet and all questions satisfactorily explained to me in a language I understand (English /Fante). I understand the contents and any potential implications as well as my right to change my mind (ie withdraw from the research) even after I have signed this form. I voluntarily agree to be part of this research.

Name/Initials of Parent/Guardian..... ID Code

Participants’ SignatureOR Thumb Print.....

.....Date.....

INTERPRETERS’ STATEMENT

I interpreted the purpose and contents of the Participant’ Information Sheet to therefore named participant to the best of my ability in the ((English/Fante) language to his proper understanding. All questions, appropriate clarifications sort by the participant and answers were also duly interpreted to his satisfaction.

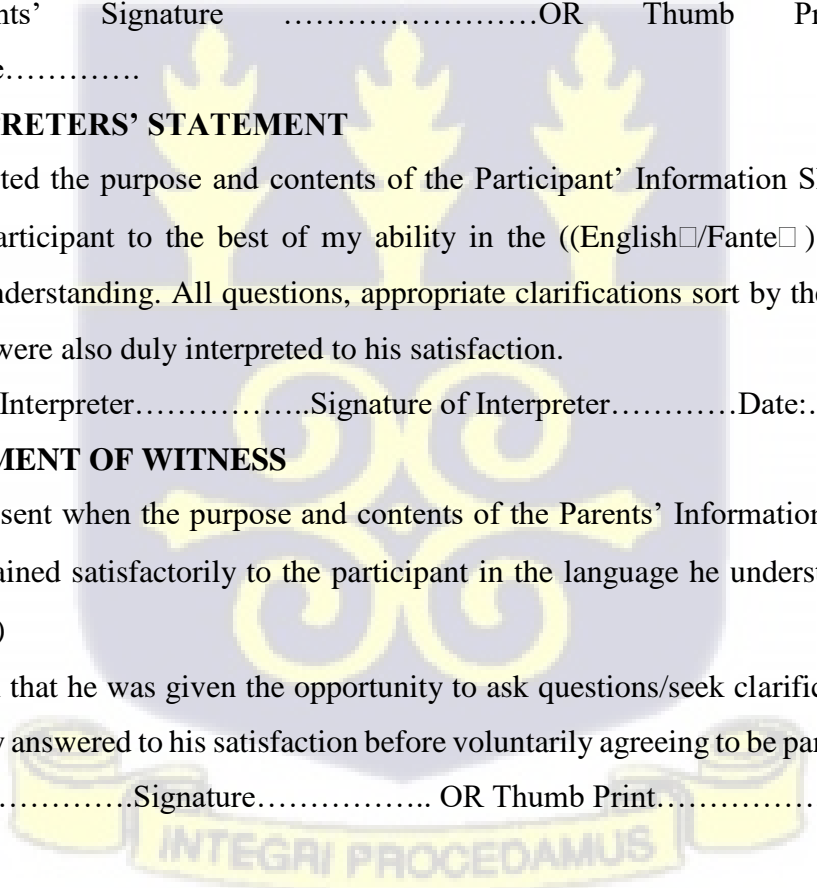
Name of Interpreter.....Signature of Interpreter.....Date:.....

STATEMENT OF WITNESS

I was present when the purpose and contents of the Parents’ Information Sheet was read and explained satisfactorily to the participant in the language he understood ((English /Fante)

I confirm that he was given the opportunity to ask questions/seek clarifications and same were duly answered to his satisfaction before voluntarily agreeing to be part of the research.

Name:.....Signature..... OR Thumb Print.....Date:.....



INVESTIGATOR STATEMENT AND SIGNATURE

I certify that the participant has been given ample time to read and learn about the study.

All questions and clarifications raised by the participant have been addressed.


Researcher's name.....SignatureDate.....



APPENDIX V ETHICAL CLEARANCE

GHANA HEALTH SERVICE ETHICS REVIEW COMMITTEE

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



Research & Development Division
Ghana Health Service
P. O. Box MB 190
Accra
Digital Address: GA-050-3303
Mob: +233-50-3539896
Tel: +233-302-681109
Email: ethics.research@ghsmai.org
11th March, 2022

My Ref: GHS/RDD/ERC/Admin/App | 22/101
Your Ref. No.

Adwoa Otiwaa Ekanem
Psychiatric Nurses' Training College.
P.O. Box 1058 Cape Coast

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

GHS-ERC Number	GHS-ERC: 030/01/22
Study Title	Effect of Comprehensive HIV/AIDS Knowledge on Risky Sexual Behaviour of Young Men in Cape Coast Metropolis
Approval Date	11 th March, 2022
Expiry Date	10 th March, 2023
GHS-ERC Decision	Approved

This approval requires the following from the Principal Investigator

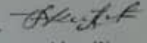
- Submission of a yearly progress report of the study to the Ethics Review Committee (ERC)
- Renewal of ethical approval if the study lasts for more than 12 months.
- Reporting of all serious adverse events related to this study to the ERC within three days verbally and seven days in writing.
- Submission of a final report after completion of the study
- Informing ERC if study cannot be implemented or is discontinued and reasons why
- Informing the ERC and your sponsor (where applicable) before any publication of the research findings.

You are kindly advised to adhere to the national guidelines or protocols on the prevention of COVID -19

Please note that any modification of the study without ERC approval of the amendment is invalid.

The ERC may observe or cause to be observed procedures and records of the study during and after implementation.

Kindly quote the protocol identification number in all future correspondence in relation to this approved protocol

SIGNED..... 

Dr. James Akazili
(Head, Ethics & Research Management Department)

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



10877028:FINAL DISSERTATION.docx

ORIGINALITY REPORT

19%	15%	12%	6%
SIMILARITY INDEX	INTERNET SOURCES	PUBLICATIONS	STUDENT PAPERS

PRIMARY SOURCES

1	ugspace.ug.edu.gh Internet Source	2%
2	www.sciencegate.app Internet Source	1%
3	www.ncbi.nlm.nih.gov Internet Source	1%
4	bmcpublichealth.biomedcentral.com Internet Source	1%
5	journals.sagepub.com Internet Source	1%
6	www.researchgate.net Internet Source	<1%
7	Ama P. Fenny, Aba O. Crentsil, Derek Asuman. "Determinants and Distribution of Comprehensive HIV/AIDS Knowledge in Ghana", Global Journal of Health Science, 2017 Publication	<1%