Exploring the perceptions and experiences of students towards HIV/AIDS peer education programme at the University of KwaZulu-Natal, Howard College Campus

By

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Declaration

I declare that this is my original work and I have given full acknowledgement of the sources referred to in this text. This dissertation is being submitted in partial fulfilment for the master's degree in Social Sciences (Psychology) at the University of KwaZulu-Natal, Howard College campus, Durban. This research has not previously been submitted to any institution for degree or examination purposes.

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Dedication

This dissertation is dedicated to my late father Mr SM Mazibuko who has always been my inspiration towards achieving this master's degree.

Acknowledgments

First and foremost, I would like to extend my deepest appreciation and gratitude to the Almighty God who gave me strength and wisdom on my hard journey of doing this study.

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Abbreviation and Acronyms

UKZN	University of Kwazulu-Natal
CHASU	Campus HIV/AIDS Support Unit
HIV	Human Immunodeficiency Virus
AIDS	Acquired Immune Deficiency Syndrome
STIs	Sexual Transmitted Infections
PLWHA	People Living with HIV and AIDS
HCT	HIV Counselling and Testing
WHO	World Health Organisation
UNAIDS	The Joint Nations Programme of HIV And AIDS
ART	Antiretroviral Treatment
TVET	Technical and Vocational Education And Training
ABC	Abstinence, Be Faithful, Condomise

Abstract

The use of peer educators has often been exploited to educate people and prevent the spread of HIV as well as other sexually transmitted infections. The importance of a well-grounded and sound sexuality health education cannot be over emphasised. As this does not only help to prevent sexually transmitted diseases or unwarranted pregnancy among the youth population but helps to educate the young and save them from the consequences of their ignorance.

This study adopted a cross sectional quantitative approach to explore the perceptions and experiences of students towards HIV/AIDS peer education program. This survey involved the use of questionnaires to gather information or data about students' perceptions, attitudes, and behaviours. A total of 242 university (post-graduate and undergraduate) students were enrolled.

The results of this study show that the overall mean perception score towards HIV/AIDS peer educators is 62.0 ± 7.4, the minimum score is 31.0 and the maximum score is 75.0 respectively. From the obtained results, participant perception score towards HIV/AIDS peer educators can be said to be quite impressive. The results obtained in this study show that there exists a significant correlation ($p<0.05$) in all three categories of students' perception to HIV peer education program. It was observed in the study that the age group 18 – 23 had the highest perception about HIV peer educators. It was also observed that the enrolled participants had a good perception about peer educators as role models, importance of peer education in information dissemination and incorporation of peer education into university setting.

Peer education involving young people has helped to educate the interested ones on issues relating to HIV/AIDS and evidence has shown that peer educators have a strong influence on their peers. Furthermore, conclusion and recommendations were drawn from this study.

1 CHAPTER ONE: INTRODUCTION AND STUDY BACKGROUND

1.1 Introduction

In 2016, it was documented that approximately 36.7 million people were infected with HIV globally (UNAIDS, 2016). Among these HIV infected persons, about 1.8 million were children. Most of the people living with HIV (PLWHA) globally live in low- and middle-income countries (UNAIDS, 2016). The number of people that died as result of AIDS related ailment in 2016 was 1.1 million (UNAIDS, 2016). After the outbreak of this epidemic, almost 78 million persons have been infected with HIV and a total of 35 million individuals have lost their lives due to AIDS-related illnesses. An estimated 25.5 million people living with HIV live in Sub-Saharan Africa (UNAIDS, 2016). South Africa has more people infected with HIV/AIDS than any country (Nattrass, 2004).

Research has shown that globally, South Africa has the highest profile HIV epidemic. An estimated 7 million PLWHA are in South Africa as of 2016. It was also showed that new HIV infection stood at a rate of 380,000 in 2015, while the number of persons that died as a result of AIDS-related illnesses was 180,000 (UNAIDS, 2016). This disease continues to pose a major public health threat. Accordingly, Scott et al. (2017) stated that more cases of HIV are found in Africa, which is the poorest region in the globe. Research has shown that HIV/AIDS is among the key problems troubling Sub-Saharan Africa (Zulu et al., 2004).

AIDS is a terrifying and overwhelming ailment that leads to susceptibility to a diversity of debilitating infections (Oskamp and Thompson, 1996). This ailment has had a great economic and social influence on the Southern Africa region (Lewis, 2004, Nattrass, 2004). As shown by Perloff (2001), the cure for HIV/AIDS still remains elusive, hence Kaufman et al. (2014) refers to HIV as a “virus of mass destruction”. Lending support to this notion is the HIV prevalence that continues to be on the increase globally. In KwaZulu-Natal, HIV incidence is nearly 40% compared to a lesser value of 18% in Northern Cape and Western Cape (UNAIDS, 2016). In Sub-Saharan Africa, the AIDS epidemic has had a more devastating effect than war “since in 1998, 200 000 people died in the war: but more than 2,000,000 died of AIDS” (Siyaya, 2007).

A commonly used strategy to halt the spread of HIV is through peer education programs. Peer education is a vital element of the HIV prevention program and has shown to be a valuable

tool. Peer education has been recognized as a very efficient tool of educating and empowering students, and this is due to the fact that they feel at ease receiving information and connecting to their peers of same age and class. Research have shown that students who rely on peer education programmes are using condoms and they are living a healthy life style compared to those that do not rely on peer educators for information (Mahat and Scoloveno, 2010).

According to the International Federation of Red Cross and Red Crescent Societies report (2009), it was stated that properly planned and implemented peer education programmes is an indispensable component of HIV prevention approach, and they can lend support to improving the knowledge as well as the attitudes and behaviour of individuals linked to HIV. effective peer education plan can encourage students to develop and sustain safer sexual behaviour leading to minimal or completely diminished risky practices connected to sex and the use of drug (Mahat and Scoloveno, 2010).

1.2 Background of the study

HIV/AIDS remains the serious civic health challenge worldwide. The HIV/AIDS contagion has existed for more than 40 years, and regrettably people are still dying because of this epidemic. WHO (2016) emphasised that since the beginning of the epidemic, 35 million people have died. UNAIDS (2016) further estimated that 17.8 million women were HIV positive and living with the virus in 2015 and 2.1 million children likewise. Therefore, the likelihood of having a generation free of AIDS cannot be achieved except if we are able to stop HIV infection in young people through education. According to UNAIDS (2016), people living with HIV accessing antiretroviral therapy in 2016 were 19.5 million, from 17.1 million in 2015 and 7.7 million in 2010. In 2016, about 76% of pregnant women who were infected with HIV accessed antiretroviral drugs to avoid transmission of the virus to their unborn babies (AVERT, 2016). The disproportion of HIV/AIDS in Sub-Saharan Africa is alarming (Kharsany and Karim, 2016). The most affected region is Sub-Saharan Africa with the estimates of 1 in every 25 people (4.2%) are HIV positive people (UNAIDS, 2016). Table 1.1 clarifies the figures of PLWHA from different regions of the world.

Table 1.1: Number of people living with HIV in 2015

Regions	**Number of people living with HIV**
Eastern and Southern Africa	19.4 million
Western and Central Africa	6.5 million
Asia and Pacific	5.1 million
Western and Central Europe and Northern America	2.4 million
Latin America and Caribbean	2 million
East Europe and Central Asia	1.5 million
Middle East and Northern Africa	230.000 thousand

Source: AVERT (2016)

AVERT (2016) reported that the biggest and the region leading in higher HIV epidemic is South Africa with the estimates of 7 million HIV positive people. South Africa asides all the countries of the globe have a larger antiretroviral treatment (ART) programme. Considering that KwaZulu-Natal province has higher HIV infection rate among all provinces in South Africa, the focus of this study was at KwaZulu-Natal, the leading infected province. The figure 1.1 below reflect the rate of HIV epidemic across South African provinces with KwaZulu-Natal reflecting the highest rate.

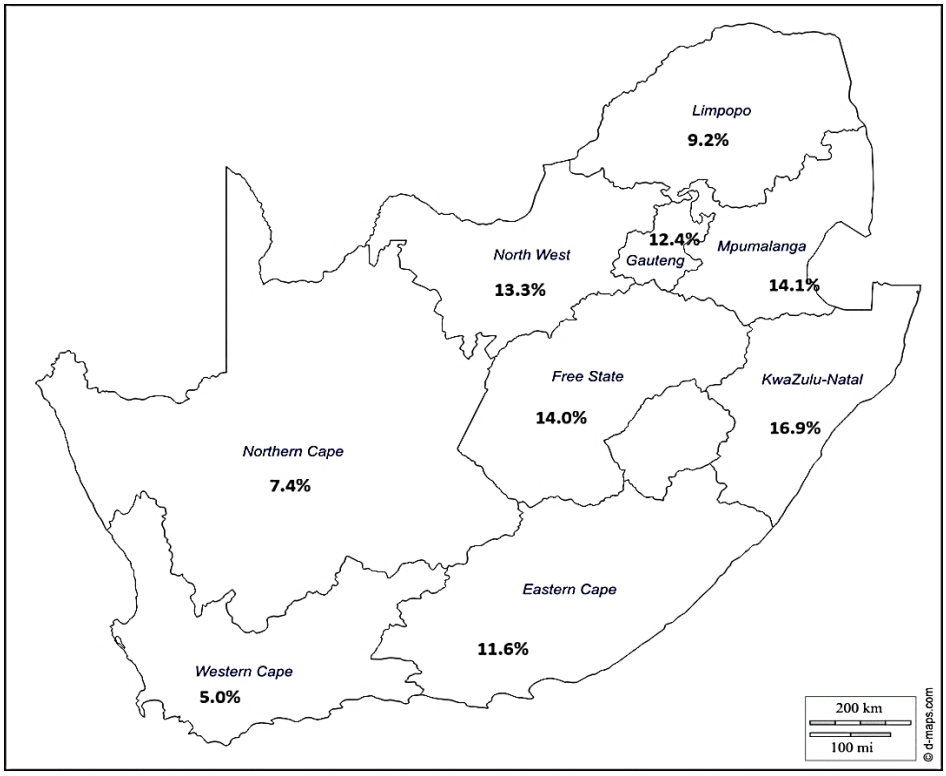

Figure 1.1: 2015 HIV Statistics in South Africa

Source: UNAIDS (2015)

Since HIV is the most devastation challenge among young people, peer education is a pertinent intervention strategy to fight against the spread of HIV/AIDS all over the world. The main aim of HIV/AIDS peer education programme in the university context is to educate students to postpone their sexual involvements, practice safe sex and promote the condom usage (Adelekan, 2017, Jackson, 2017, Nonkelela, 2015). The effectiveness of the above preventive measures will be done through sharing of HIV/AIDS information, educating through characters, that is where peer educators should remain being role models no matter what and by providing the individuals and group support where needed. Peer education can effectively change the knowledge, attitude, behaviour and the beliefs of students through education, empowerment as students feel comfortable when receiving information from people of the same group. Many studies conducted prove that peer education is an active plan in the context of HIV/AIDS prevention and control (Adelekan, 2017, Jackson, 2017, Nonkelela, 2015).

A well planned and well implemented HIV/AIDS peer education programme will determine the improvement of knowledge, attitude and behaviour of the epidemic. Therefore, the practices of safer sexual behaviour, fight against the spread of HIV/AIDS and the promotion

of sexual reproductive health lifestyle can be achieved through successful peer education in the university context.

1.3 Problem statement

AIDS presently ranks as one of the most shocking cause of death globally (Karim and Karim, 2010) and it has had a devastating toll on Southern Africa (Nattrass, 2004). AIDS attacks the most productive population group in the society leading to loss of income causing terrible impacts on families. This ends up in the development of a generation that is full of orphans as a result of AIDS causing severe strain on the families as these kids are brought up (Lewis, 2004).

This pandemic also impacts negatively on the government; this is because it is the responsibility of the government to make bulk of the funds needed to combat HIV available. Also, it is the obligation of the government to meet up the "cost of care for population groups who are infected and are dependent on the public health care system as a result of HlV/AIDS pandemic" (Lewis, 2004). South Africa has invested greatly in antiretroviral programmes to the tune of $1.5 billion yearly (UNAIDS, 2016). Due to the cure for HIV/AIDS remaining elusive, several prevention approaches have been put in place in fight this disease in South Africa. Research evidence shows that "these strategies include: mother to child transmission prevention programmes; voluntary counselling and testing (VCT) programmes" (Nattrass, 2004): as well as the use of condoms (Oskamp and Thompson, 1996). Also, HIV/AIDS education programmes have been instituted, and all these are aimed at halting HIV spread and thus causing a behavioural change (Hak-Su, 2004, Deutch and Swartz, 1996).

HEAIDS (2009) report highlighted that the overall HIV incidence among staff and students at the University of KwaZulu-Natal was 2.8%. Based on the stratified prevalence rates, it is estimated that there are about 675 students, 15 academic staff and 240 admin/service staff living with HIV at UKZN. HIV prevalence is slightly higher in women than men (3.1% *vs* 2.6%); a trend that is consistent across all institutions surveyed.

The HIV epidemic is unevenly distributed in South Africa. KwaZulu-Natal province has the highest HIV prevalence. It was expected that the survey would find that UKZN staff and students are disproportionately affected by HIV. It is therefore somewhat surprising to see that this is not the case and that the HIV prevalence in UKZN students is below the national rate. This could be due to a skewed sample where students who knew their HIV positive status did

not participate in the survey creating an artificially low HIV prevalence rate among UKZN students. Based on the response rates across the strata, 2.4% prevalence rate in UKZN students is still unacceptable, it translates to one in 40 students being HIV infected, a rate that needs to work diligently to reduce. The HIV prevalence rates in academic, administrative and service staff need to be viewed in the same vein any HIV prevalence rate above zero in UKZN students and staff is not acceptable. Therefore, the university could play a vital role in shaping student attitudes and behaviours towards HIV/AIDS and safer practices. This study therefore explored the perceptions and experiences of students towards HIV/AIDS peer education program at a selected university in Kwa-Zulu Natal province. The study was initiated because there is no study that was done to explore the perception and experiences of students towards HIV/AIDS peer education programme.

HIV as an illness affects the person first and foremost at the biological level in the form of an aggressive virus that compromises immunity. Every illness experience represents a unique and dramatic negative experience for the patient, it is associated with a profound and authentic psychological engagement of people living with HIV themselves and the significant people in their lives. Psychological and social factors influence the ability to cope with HIV/AIDS more than the severity of the disease. Stigma and discrimination are critical factors to be considered. HIV has profound psychosocial effects on the HIV infected person, the family, the community, and the society at large.

1.4 Purpose of the study

1.4.1 Aims and objectives

The aim of this study is to explore the perceptions and experiences of students towards HIV/AIDS peer education program at the University of Kwa-Zulu Natal, Howard College Campus.

I. To outline the knowledge, attitude and behaviours of student about HIV/AIDS.

II. To describe the students' perceptions towards HIV/AIDS and peer education program.

III. To narrate students' experiences towards HIV/AIDS peer education program.

IV. To describe the roles and responsibilities of peer educators on behaviour change.

V. Identify practices performed in HIV/AIDS peer education program.

VI. To describe the activities and challenges that can be conducted to enhance HIV/AIDS peer education program.

1.4.2 Research questions

I. What were the knowledge, attitude and sexual behaviours of the students before HIV AIDS peer education program?
II. What are the students' perceptions towards HIV/AIDS peer education program?
III. What are students' experiences of HIV/AIDS peer education program?
IV. What is the roles and responsibilities of peer educators on behaviour change?
V. What practices are performed in HIV/AIDS peer education program at a selected?
VI. What are the activities and challenges encountered by students while using HIV/AIDS peer education program?

1.5 Significance of the study

Increasing the number of students who refrain from sexual contact or engage in the use condoms if they are sexually active is always enhancing the health promotion and promoting positive lifestyle. University plays a vital part in providing information about HIV/AIDS to a great number of accessible students. Also, the university peer education programme has been used efficiently in information dissemination in several areas like "HIV/AIDS education, substance use, violence prevention" (Mahat and Scoloveno, 2010) as well as in other risk areas.

There is need to implement programs that help in prevention of risky behaviours among students as this will also help add up to the existing evidence of how effective peer education is in halting the spread of HIV and educating the target audience. Precisely, it is essential to appraise the university HIV/AIDS peer education programs that articulate customarily specific information to students, and to determine the impacts of dominant perceptions and experiences in the context of students' HIV knowledge.

Knowledge about the use of contraceptives like condoms alone is not enough to combat this scourge. There is need to institution of care programs to continually address the social issues that may arise as a result of HIV infection (van der Schaaf, 2004). This idea was supported by Hak-Su (2004) who showed that though condoms form an integral part of the protective measures for halting HIV/AIDS epidemic, they still may not be sufficient. But what counts most is achieving behavioural change via educational programme like HIV/AIDS peer education (Hak-Su, 2004).

As highlighted by Siyaya (2007), students are at an “experimental and developmental stage of life”, and this can have a great influence on them and making them to be exposed to HIV infection. The tendency of youths to want to explore when they are on campus may lead to them engaging in risky sexual behaviours in order to prove their maturity and also to be seen by their peers as up to date (Siyaya, 2007). As postulated by Deutch and Swartz (1996), HIV/AIDS peer education and raising awareness about the use of condoms are vital components of the total health care tactic to combat the spread of HIV. Therefore, enlightening programs that results in behavioral change to condom use as well as abstinence is vital to encourage students to practice and engage in preventive actions against HIV/AIDS.

The results of this study will contribute more information to the field of HIV prevention and to the peer education practices. It will also provide information about the HIV/AIDS peer education programme, and it will also be of great help in publicizing findings for sustained exchange of data and resources on HIV/AIDS peer education. Findings of this study will support the university HIV/AIDS unit, other researchers in this field, and health care providers to educate students on how to remain healthy through refraining from risky behaviours that will predispose them to HIV infection.

1.6 Conclusion

This chapter provides background information of the study and it introduces the statement of the problem, as well as the purpose, aims, objectives and research questions of the study. The first chapter has also outlined the significance of the study.

2 CHAPTER TWO: LITERATURE REVIEW

2.1 Introduction

This section covers the literature on HIV/AIDS and peer education. The HIV/AIDS prevalence is the stumbling stone in human civilisation in the whole world (Kang'ethe, 2014). The importance of peer education in halting HIV/AIDS has been recognized in many studies. This section covers an overview of the HIV/AIDS epidemic around the world, in tertiary learning institution, knowledge as well as attitude and behaviours of student about HIV/AIDS, students' perceptions towards HIV/AIDS and peer education program, HIV peer education, importance of peer education and the students' experiences towards HIV peer education program. Also contained in this section is the recruitment of peer educators and how they are trained.

Keywords: Peer education, HIV/AIDS, HIV/AIDS in higher education, perceptions and attitudes towards HIV/AIDS, HIV/AIDS prevention and control.

2.2 What is Peer Education?

Peer education is defined in various definitions presented below pertaining to HIV/AIDS Peer Education. For instance, Merriam Webster's Dictionary (1985) defined peer education as "a popular concept that implies an approach, a communication channel, a methodology, a philosophy, and a strategy" (Merriam-Webster, 1985. p,56). The word 'peer' denotes "one that is of equal standing with another; one belonging to the same societal group especially based on age, grade or status". The word 'education' (v. educate) means "development", "training", or "persuasion" of a person and or a thing, or "knowledge" which results from an educational process.

The USAID (2009) manual describes peer education as a development process involving similar people who are learning collectively in an informal way. It is further stated that peers are people sharing similar characteristics like "age, background, job roles, experiences, interest and values" (USAID, 2009). Thus, in the same understanding, a peer educator in the office or a place of work is somebody sharing similar qualities, and qualified to facilitate deliberations on matter pertaining to HIV/AIDS risk behaviour. Also, this person leads his or her peers in evaluation of solutions and creating a link between peer education program and the target audience.

2.3 Consequences of HIV/AIDS denialism in South Africa

In late 2017, PLWHA in the world was 36.9 million, and 7.2 million infected people were in South Africa (AVERT, 2017). The majority of those infected with HIV eventually reached the advanced stage of AIDS and died. It is a fatal disease and had impacted on almost every family, workplace, township, farm, suburb, church, and organisation (Kalichman, 2018).

The high rate of HIV infections and AIDS deaths today has its roots in the HIV/AIDS strategies of the previous South African president: Thabo Mbeki's government (Kalichman, 2018). This policy of the South Africa government did not only negatively impact on HIV/AIDS prevention and programs, but also set back successful programs that were introduced by NGOs and health professionals (Patterson, 2018).

2.4 HIV/AIDS stigma and discrimination in South Africa

HIV associated stigma as well as discrimination refer to prejudice, poor attitudes and manipulation focused at PLWHIV. The HIV/AIDS stigma continue to be the main obstacle to adequately combating the most devastating epidemic humanity. Stigma persists in perpetuating discrimination and remains a key factor contributing to HIV soread globally (Haffejee et al., 2018). The manifestations of stigma related to HIV is different across continents, countries, communities, religions or cultural groups, and individuals. Such behavior at the university level is usually directed at those who are involved in socially improper activities such as prostitution, drug addiction, homosexuality, or promiscuity (Haffejee et al., 2018).

Socioeconomic conditions, and cultural habits that are part of most African communities, are considered to contribute towards stigma and discrimination. Stigma continues to linger particularly in sub-Saharan countries irrespective of the fact that it has damaging impacts on the public health status and human rights (Treves-Kagan et al., 2017).

Historically, marginalisation is a characteristic of most African communities in the world, and consequently, stigma has a major impact on this population. Social differences and inequalities arise from stigmatisation. Many people who live with HIV/AIDS are unprotected from stigma, living a life of loneliness and fear (Treves-Kagan et al., 2017). They are deprived of services that are rightfully due to those affected by the disease. Stigma impacts on services such as HIV counselling and testing (HCT) because it strengthens existing bad expectations, beliefs and animosity for people who live with HIV (Treves-Kagan et al., 2017). The HIV/AIDS stigma

and discrimination are divergent, “they range from partner desertion, through accusations of infidelity and isolation to total rejection by family and friends” (Treves-Kagan et al., 2017). It is even worse at the university setting because a student may end up not performing academically and leads to repeating modules. It generates doubt about disclosure and therefore develops secrecy, which potentially encourages transmission. It drives the epidemic underground.

The HIV/AIDS epidemic has become established in a time of rapid globalisation and rising polarisation amongst opulent and underprivileged alike. Innovative methods of social rejection related to these global changes have reinforced pre-existing social inequalities and stigmatisation of the underprivileged, vagrant, evicted, and unemployed. As an outcome, poverty grows defencelessness to HIV/AIDS, and HIV/AIDS worsens poverty (Adeyinka et al., 2017).

The negative impact which results from stigma and discrimination are extensive. Some persons are avoided by family, friends and the public, whereas others are made face ill treatment in public places. All these stand as a barrier to HIV testing and management (Hornik, 2018). Education can play a vigorous part in reducing stigma and discrimination to counteract the growth of HIV infection. Obliviousness is always an obstacle to improving any knowledge (Hornik, 2018).

2.5 HIV/AIDS in tertiary education

“Universities produce skills, aptitudes and knowledge with immediate economic application” (Petros et al., 2017). Hence, it preserves the connection between knowledge and the zest of life for stability, growth and indefinite future. Students in higher learning are observed as the one partaking in risky behaviours, leading to high possibilities of contamination of HIV because of their peer social approval element and their vulnerability to experience life in the absence of parental supervision (Petros et al., 2017). HIV/AIDS severity in South Africa conveys a menace concept in academic sphere. “The majority of students in South Africa’s public higher education institutions (HEIs) and technical and vocational education and training (TVET) colleges belong to this most affected age group, especially those 18–24 years old” (Setswe et al., 2017). The youths are mainly susceptible to HIV infection due to their physical, mental, social and economic qualities. Students in tertiary institutions are the most at high risk due to

their sexual behaviours, attitudes, unapplied knowledge and the peer group the individual associate themselves with (Oppong and Oti-Boadi, 2013).

The deadly HIV/AIDS epidemic continues to linger and pose a grave danger to the advancement of trained professional to meet the socio-economic and developmental needs confronting South Africa as a country. A severe challenge is the rising infection rates amongst teenagers in sub-Saharan Africa (HEARD, 2016). There is a nationally coordinated effort to establish and reinforce the ability of South Africa's tertiary education division to provide comprehensive answer to the obstacles posed by HIV/AIDS epidemic. A survey by HEARD (2016) revealed that HIV amongst the scholars and staff at higher institutions of learning is less common than is found in the general population.

Same research revealed that Eastern Cape students were 6.4% HIV infected, followed by the KwaZulu-Natal with 6.1%. The Free State province had the third uppermost occurrence, with 5.3%. Additionally, in Gauteng, Limpopo and North West, the incidence was 2.2%. Western Cape registered the lowest infection rate of 1.1%. The study reflected variations according to race, with the highest prevalence of HIV occurring among African students (5.6%) but only 0.1% of white students. Only 0.8% of coloured and 0.3% of Indian students were found to be HIV-positive" (HEARD, 2016). Studies done in African countries like Ghana, Kenya, Nigeria, Tanzania, and South Africa recognised university students as been at a higher risk of HIV infection owing to their risky sexual activities (Adam and Mutungi, 2006, Eko Jimmy et al., 2013, Mberia and Mukulu, 2011, Ndabarora and Mchunu, 2014, Oppong and Oti-Boadi, 2013).

The rate of HIV/AIDS epidemic can be caused by numerous social ills among university students. There is a high number of transactional sex in the higher institutions which leads to the increase of HIV/AIDS epidemic (Ntsieni, 2017). Transactional sex refers to the "exchange of money or gifts for sexual relationships and is considered as a sexual risk behaviour worldwide" (Ntsieni, 2017). It continues to promote STI, unwelcome pregnancies and other health problems amongst persons engaging in these kinds of relations (Ntsieni, 2017).

The main source of transactional sex among students includes poverty, power imbalances and peer pressure. Cross generational sex is another social ill that increases HIV/AIDS epidemic and risk sexual behaviours among university students. Numerous studies have testified that female scholars engage in cross generational sex (Ntata et al., 2008), here these female students in sexual activities with older males because they are able to provide financial compensation

which may be in several forms. Cross-generational sex appears to be a considerable foundation of infection amongst South African youth population (Katz and Low-Beer, 2008). Such associations expose female students to HIV infection. This condition is credited to social and economic parts of gender inequality and also to issues like poor negotiating power when it comes to the use of condom (Simbayi et al., 2005, Wamoyi et al., 2016).

Higher Education and Training HIV/AIDS (HEAIDS) is a program of the Department of Higher Education and Training (DHET) that is executed through Higher Education South Africa (HESA). The objective of the HEAIDS programme is to advance the support for HIV mitigation programs at South Africa's public Higher institutions of learning (HEAIDS, 2009). Therefore, the introduction of HEAIDS in higher institutions automatically makes it easy for HIV/AIDS programmes to be implemented successfully; there are policies and prevention programmes that must be aligned to enhance the program. HEAIDS is a nationwide coordinated effort to establish and reinforce the ability of South Africa's higher education subdivision to provide comprehensive answer to obstacles posed by the HIV/AIDS epidemic, as well as assume guidance control of South African HIV/AIDS response (HEAIDS, 2009).

HIV/AIDS strategies and HIV eradication programs in South African higher learning institutions have been mandated to implement interventions expected to halt HIV/AIDS since the epidemic is still in existence. These interventions include current HIV/AIDS prevention strategies, education and awareness raising (Van Wyk et al., 2006). HIV prevention programs at institutions of higher learning have mostly focused on raising knowledge, awareness as well as practices (Mberia and Mukulu, 2011). Correspondingly, Reddy and Frantz (2011) claim that increase knowledge level about HIV is not enough to encourage behavioural change amongst students.

In order to cause an increase in the use of HIV prevention plans, some schools have made contraceptives live condoms easily and freely obtainable, and widely endorsing their use (Mberia and Mukulu, 2011). A research conducted on HIV/AIDS risk factors among students at the University of the Free State has revealed that better use of HIV/AIDS prevention programs will enhance student's positive style of living (Badenhorst et al., 2008). Though these HIV prevention plans are being encouraged, it has also been observed that in several research sexual behaviour of students in the university setting do not match with their high level of awareness as well as knowledge regarding HIV/AIDS and HIV means of transmission (Ndabarora and Mchunu, 2014, Simbayi et al., 2005). This is not far from the fact that these

students continued to involve in vulnerable sexual activities which puts them at a higher chance of getting infected with HIV (Badenhorst et al., 2008).

2.5.1 Stigma on campus

Stigma attached to HIV still exists. Stigma results in devaluation where a person is made to appear useless or worthless in the eyes of others, while discrimination is unfair segregation or restriction placed on an individual. HIV/AIDS associated stigma refers to the negative attitude and unfair treatment towards PLWHIV (Kikwasi et al., 2017). The end results of stigma and discrimination, particularly at the university context will lead to drop outs and lack of productivity in academic context, let alone the pain from rejection of your friends and family. Most of rejected people from their families and friends usually prefer to live in denial where they do not have any access to treatment and control of the existing virus hence performing risky behaviours that leads to the continuous spread of HIV (Aguwa et al., 2016, Reyes-Estrada et al., 2015). In addition, in South Africa, it is a legal offence to stigmatise and discriminate people living with HIV, and the university should also have a policy to address stigmatisation directed towards students living with HIV/AIDS.

HIV and AIDS is considered manageable through education, but the ancient grip of stigma still raises its ugly head everywhere. Stigma poses an uphill task in HIV/AIDS prevention and control. Negative attitude people usually discriminate and stigmatise PLWHIV. Stigma and discrimination negatively influence people's readiness to reveal their HIV status (Kikwasi et al., 2017). Various studies conducted proves that PLWHIV encounter stigma as well as discrimination at the family, community, work place, health-care as well as educational settings (Aguwa et al., 2016, Reyes-Estrada et al., 2015). Poor education and the shortage of awareness's are the main reasons of the existence of stigma and discrimination to HIV infected persons (Jain et al., 2017).

2.6 The University of Kwa-Zulu Natal Campus HIV/AIDS support Unit (CHASU)

In the University of KwaZulu-Natal, initiatives to advance knowledge regarding HIV and AIDS is currently in practice. The UKZN HIV/AIDS Programme has support units on each of the campus. These units deliver services relating to HIV/AIDS. The UKZN HIV/AIDS Program has five main areas by which it facilitates implantation of the "National Strategic Plan (NSP) for HIV, STIs and TB (HAST) which accentuates the effective implementation of comprehensive interventions in combatting the spread of HIV in the province in conjunction

with other stakeholders (NGO's and Government Departments) through wellness campaigns in all five university campuses, and this include dialogues in all university residences". A UNAIDS (2012) report revealed that most university students do not have sound knowledge of the modes of HIV transmission and also they are not well informed with regards to the methods with which they can protect themselves. The programme is made up of HIV Counsellors and as well as Health Promoters in all five campuses, resident at the Campus HIV/AIDS Support Unit (CHASU). The main aim of CHASU is to collectively fight the spread of HIV, in particular to make students that graduate alive and well despite their HIV status, and through dual protection we can stop the high spread of HIV, STIs and unplanned pregnancy.

2.6.1 ***The Howard College Peer Education Program***

The University of KwaZulu-Natal as located in the province with probably the most advanced HIV/AIDS prevalence in South Africa. A report produced on the susceptibility of this university to HIV/AIDS revealed that both staffs and students are equally affected either through infection, illness or death of colleagues and family members. Over the past fifteen years, the university has affirmed its commitment to the halting HIV/AIDS spread, this has culminated in the development of an HIV/AIDS Network (HIVAN) and its vision for the founding of HIV/AIDS support units across the five campuses. The support units aim to ensure that various support structures needed in order to address all issues surrounding HIV/AIDS are in place. These include effective education, counselling, ensuring respect and dignity for the infected, gender issues as well as the availability of condoms. The support units therefore act as the bridge between the university community and various HIV/AIDS support and care service providers.

Approximately 90 students are trained at the beginning of each year although few will commit themselves fully to the peer education duties after the training. Adverts are put up on campus notice boards as the first semester commences. As the response is huge, there is bound to be selection where certain features are considered, for example, previous mentorship experience and leadership skills. Successful candidates receive training to equip them with knowledge which they will later pass on to their peers. The training covers issues like voluntary counselling and testing, the ABC approach, condom demonstration, sexually transmitted infections as well as available treatment options. Supportive training sessions are done with those peer educators who have proved their commitment to the work. Ongoing trainings encompass leadership workshops, peer counselling training and training aimed at equipping

the peer educators with knowledge of particular areas of HIV, for example, antiretroviral therapy, stigma and discrimination.

2.7 Recruitment and training of peer educators

Peer education programme is effective when peer educators are being recruited appropriately through consideration of some certain characters, personality and the willingness, then the peer education training must be done in a qualitative way. The enrolment and selection of peer educators must not be the obligation of the HIV/AIDS unit supervisors and health promotors only. All relevant stakeholders must be engaged in the selection of peer educators (Layzer et al., 2014a). The effectiveness of the programme dependents on the suitable recruitment approaches, the value of exercise educators receive, and the level of supervision that is offered to them (Mason-Jones et al., 2011).

Peer education trainings should be done in a very interesting, friendly conducive and fun filled manner just to gear up the development of knowledge, attitude, behaviour and perceptions of peer educators in order to enhance the positive values to their peers and encourage health behaviours. The availability of the peer mentors and educators among all campuses will cultivate the vivacity of the programme, hence addresses the issues related HIV/AIDS prevention and treatment. Peer education trainings should be done frequently to strengthen the knowledge and ongoing campus education services to support students to undertake informed choices and proper lifestyle adoptions that will enhance healthy living and success in their studies (Turner and Shepherd, 1999).

2.8 Rationale for use of peer education

Peer education is considered a vital component of a comprehensive HIV/AIDS intervention strategy. Peer education is a reliable foundation of information that can empower students and they are more successful than professionals or adults in sharing the HIV/AIDS information through conventional methods (Layzer et al., 2014a).

2.9 Peer educators are a credible source of information

Moshki et al. (2017) observed that the major reason for the recognition of peer educators is the fundamental acceptance that they are credible and influential role models. This assumption is further supported by the social learning theory which observes adolescents as more likely to

endorse modelled behaviour if they see the models as sincere (Bandura, 1986a). A study which was conducted in 2000 discovered that most students deliberate AIDS subjects with their peers (Li et al., 2004). This indicates how important peer education is and reveals peer educators as a trustworthy information source.

Well designed and accessible peer education programs that promote abstinence, safer sex and condom use may cause an upsurge in sexual preventative behaviours among sexually active students (UNAIDS, 2015). A good example of an effective peer education programme is the ZAWECA peer education project. This is a "collaborative project between the University of Western Cape and the University of Zambia" intended at facilitating and promoting institutional teamwork for the development of peer education programs that would prepare students with the needed competencies and skills for safer sex practices and also eradicate transmission of HIV (ZAWECA, 2005). The peer education programs at both universities were effectively significant on students by placing HIV/AIDS on their agenda; hence, peer educators can be considered as a credible source of information.

2.10 Peer versus adult led education

Peer education program indicates that peer led interventions are seemingly more beneficial in improving knowledge of HIV/AIDS and also behavioural change compared to adult led education. There was a study that was conducted to assess the efficiency of peer led education when likened to adult led peer education prevention programs with learners (Mellanby et al., 2001). Research evidence shows that peer led groups showed greater improvement in prevention skills, knowledge, as well as risk perception and attitudes. Specifically, peer led group showed a higher knowledge score of HIV/AIDS as compared to that in the teacher led the group (Borgia et al., 2005).

2.11 Peer education is empowering to the peer educators

Scholars have revealed that peer educators profit from the process of peer education programs in many various ways (Milburn, 1995). Peer educators are learning how to educate their peers, and help them to feel a sense of responsibility in terms of educating peers and being part of the educational process (Layzer et al., 2014a). This improves their self-confidence and enhances their personal lives. Likewise, Lachman and Pawlina (2016) indicated that the skills peer educators gain will make them more productive in future. In addition, skills which are gained from being a peer educator include; how to give and receive supervision and feedback, working

as a team, planning and preparation, critical thinking as well as reliability. Automatically they will benefit in future, particularly as they enter the world of work. Peer education benefits both the recipient and the provider of the information. Peer education program has a great impact on peer educators because of their high level of self-esteem, confidence, communication skills and social skills (ZAWECA, 2005).

2.12 Peer education and behaviour change

Peer education plays a vital role in helping students to change their sexual behaviour hence reduce HIV transmission. When students learn from their peers, there are high chances that they are likely to acquire more HIV knowledge leading to the adoption of better sexual behaviour change (Lachman and Pawlina, 2016). A study which was conducted to examine whether there existed any variation in knowledge and normative beliefs regarding abstinence and condom use after exposure to a peer sexual health intervention revealed that HIV knowledge and normative beliefs about abstinence and the use of condom were more positive among students in the intervention schools. Furthermore, peer education is efficient in enhancing the knowledge of HIV/AIDS, positive normative beliefs and behaviour. Peer educators facilitates sexual behaviour change, thus helping to reduce the associated risk and spread of HIV infection. For example, a study conducted to assess the influence and importance of a workplace peer education program revealed that the peer education programme was successful in refining knowledge, persons attitudes and their practices linked to risky sexual behaviour (Mahat and Scoloveno, 2018).

2.13 The Role of Peer Educators

Peer education effectively changes the individual's level of knowledge by trying to change a person's understanding, attitudes, views, or behaviours. Nevertheless, peer education can also cause changes at societal level via the modification of norms and encouraging collective feat which results in changes in programs as well as policies (UNAIDS, 2016). According to UNAIDS (2015), "community mobilization and AIDS, technical update, outlines some of the roles that a peer educator performs as follows":

Raising awareness: this may take the form of a formal or informal peer education programs. Peer educators take part in raising awareness, engage in presentations, health promotion, mobilization of people in the community, and work with in collaboration with media outfits to spread information.

“Behaviour change communication”: peer educators through the use of interactive process offers the target audience simple and understandable details regarding HIV and AIDS, leading to the target population making informed changes to develop personal protection. This also inspires their target to access suitable services to maintain and improve on safer practices.

“Community mobilization”: this is a practice through members of a community are made to jointly tackle their individual as well as collective weakness. This is achieved by the community members recognizing and categorizing their problems, taking part in decision making, evaluation of outcomes and taking responsibilities for both achievements and disappointments.

2.14 Linking peer education and Social Learning Theories

The theoretical framework underpinning this research is a social learning theory outlined by Albert Bandura (1997). This theory has three major constructs: (1) Cognitive factors also known as personal factors, (2) Environmental factors, and (3) Behavioural factors. According to Albert Bandura, social learning theory outlines the continuous reciprocal interaction between cognitive, environmental and behavioural determinations through human behaviour. “Social learning theory asserts that people serve as models of human behaviour, and some people (significant others) are capable of eliciting behavioural change in certain individuals, based on the individual's value and interpretation system” (Bandura, 1986a). Therefore, peer education servers as a behaviour communication intervention since it has the potential to impact and guide large number of students in the university context. Social learning theory is a crucial theory with regards to peer education because it explains the cognitive sense of a particular behaviour.

Social learning theory is the best theory in terms of effectiveness of HIV/AIDS peer education programme in university context by considering the following elements:

i. Students should observe from the peer educator’s behaviours.
ii. Students should observe only positive behaviour model from peer educators.
iii. Peer educators should increase their capacity and being confident when implementing, conducting campaigns, HIV/AIDS outreach and many other new skills.
iv. Peer educators should attain a level of positive attitudes when implementing novel skills and also strongly believe that the positive impact will be enhanced.

v. Peer educators should learn to familiarise with support from their original surroundings (university community) to make use of their new competencies.

Social learning theory is effective and a well-recognised theory in the field psychology and health education more especially to peer educators who are willing to educate other students to gain more health supporting skills and knowledge. Social learning theory is crucial because it can assist peer educators to determine why certain behaviours exhibited and why other actions are not. Several health instructors feel that social learning theory is reliable with their own understanding and "hunches" of what works in prevention programs. Nonetheless, SLT has more than "hunches" to support its effectiveness.

This study has a specific focus on behavioural factors, and the drawing below will further elucidate. This theory focuses on the social aspect of distinct behaviour change. Observing others' actions can facilitate understanding of the penalties of their activities, and an observer can decide to adopt or leave the behaviours shown (Bauman, 1998). Peer education relates to SLT where the crux of peer education as a basis of external influence rests on preparing people with the need skills to handle life scenarios.

Social learning theory consumes a notion of human nature that is matched with checking HIV infection via educational means. The SLT promoter imparting of beliefs in persons to make them have the capability to transform their minds as well as been able to tolerate situations effectively (Pastorino and Doyle-Portillo, 2012). This concept also supports the fact that the surroundings have a great influence on a person and can mould a person, thus that person can build self-efficacy from personal encouragement. This SLT trusts that new manners are developed by role modelling the actions of other people or by direct influence by the knowledge of others (Pastorino and Doyle-Portillo, 2012). This theory also endorses the power of credibility and reinforcement of learned behaviours. Therefore, social learning theory advocates HIV/AIDS peer education program and is chosen to guide this research.

2.14.1 Self-efficacy

Self-efficacy can be said to be the belief that one can impact the activities of everyday life (Bandura, 1994). Professed self-efficacy is a person's conviction that he or she can effectively accomplish or undertake activities essential for favourable outcomes (Cherry, 2011). According to the learning theory, persons with a resilient sense of personal efficacy engage

tough tasks, undertake challenging activities, pull through defeat and persevere situations of failure. This is the reverse with people with low self-efficacy (Bandura, 1994).

When applied to HIV spread inhibition, SLT proposes that the more effective people talk to partners regarding safer sex or exercising self-control over sexual actions, the increase in their chance to embark on the task of bringing up the matter of safer sex, persevere in the midst of their partner oppositions and turn safer sexual ideas into behaviours. However, those who have low self-efficacy might be subdued by their partners and may not be able to force the partners to use protection, hence they become dejected after failed efforts to negotiate condom use thus failing to engage in safer sex practice (Bandura, 1994, Cherry, 2011).

HIV/AlDS and other STIs are different from other communicable diseases due to the fact that their occurrence is mainly dependent on behavioural patterns. “Application of this theory to HIV/AIDS prevention may help in the development of more effective programs that may help people protect themselves against HIV infection” (Mitchell et al., 2018). Understanding actions that put persons at danger of HIV infection and recognizing the means to turn things around may assist in combating HIV spread (Kebaabetswe and Norr, 2002).

Communication education can raise self-efficacy (Bandura, 1994). Education attempts to convey precise information, thus causing an increase in awareness regarding health risk. This also imparts social and management abilities via modelling. It offers wide practice of these skills for increasing the chances that individuals will accomplish them in situations that occur in real life and delivers the needed social support to sustain behavioural adjustment. According to Bandura (1994), “being self-efficient is an important individual’s strength”.

2.14.2 Role Modelling

Social learning theory is known to revolve around the process of information acquisition or learning directly associated with observation of models. This theory is of the assumption that individuals learn in order to influence happenings via observation of “role models, verbal persuasion (education), success and failure, experiences and interpretation of these outcomes” (Bandura, 1994). This construct is founded on the belief that individuals subconsciously do that which is “normal” through watching the activities of others. Therefore, HIV/AIDS peer educators should serve as role models for change. According to Webb and Gripper (2010) in social learning theory, Bandura advocated that there is more likelihood that a person is going to evaluate his/her abilities by noticing the coping mechanism seen in their peers. This theory

is impacted by social components such as “information, skills, motivation and social support” (Webb and Gripper, 2010).

2.14.3 Credibility

Social learning theory emphasises the vital component of learning whereby peer education needs to be reliable so that when combined with other components it will make good impact. Peer educators inevitably become credible among their peers. The SLT stresses that for a person to be a credible role model, the person will need to be an individual of high status within the peer group (Bandura, 1977). Nevertheless, three notable exceptions are Wiist and Snider (1991), Kelly et al. (1991), and Grossberg et al. (1987) these researches have shown that leaders who have a common say in their communities are very effective peer educators. This is not far from the fact that their position in the community contributes to their effectiveness (Kelly, 1991).

2.14.4 Reinforcement

Social learning theory states that peers can reinforce a behaviour that is socially learned. “Reinforcement is a concept in social learning theory which seems to have been borrowed from Behaviourism” (Kelly et al., 1991). The method where reinforcement can work in peer education is when peer educators apply influence and pressure. Using peer educators is an advantage since students devote an excessive time socializing with their peers, hence this becomes a chance for regular reinforcement of forms of behaviour exists. A message that is reinforced via a current contact is possibly going to be far more impactful than one which is just a one-off talk or message by a parent or lecturer. Correspondingly, Kelly et al. (1991) claimed the effectiveness of the learned behaviour through frequent prompting about safer sex by credible peer educators. This can be seen as external reinforcement for behavioural change. In Addition, Bandura (1994) also claimed that consistent reinforcement by peers was a critical feature needed for the success of a health education program to promote the use of contraceptive. Therefore, effective reinforcement of course necessitates the peer educators to have ongoing contact.

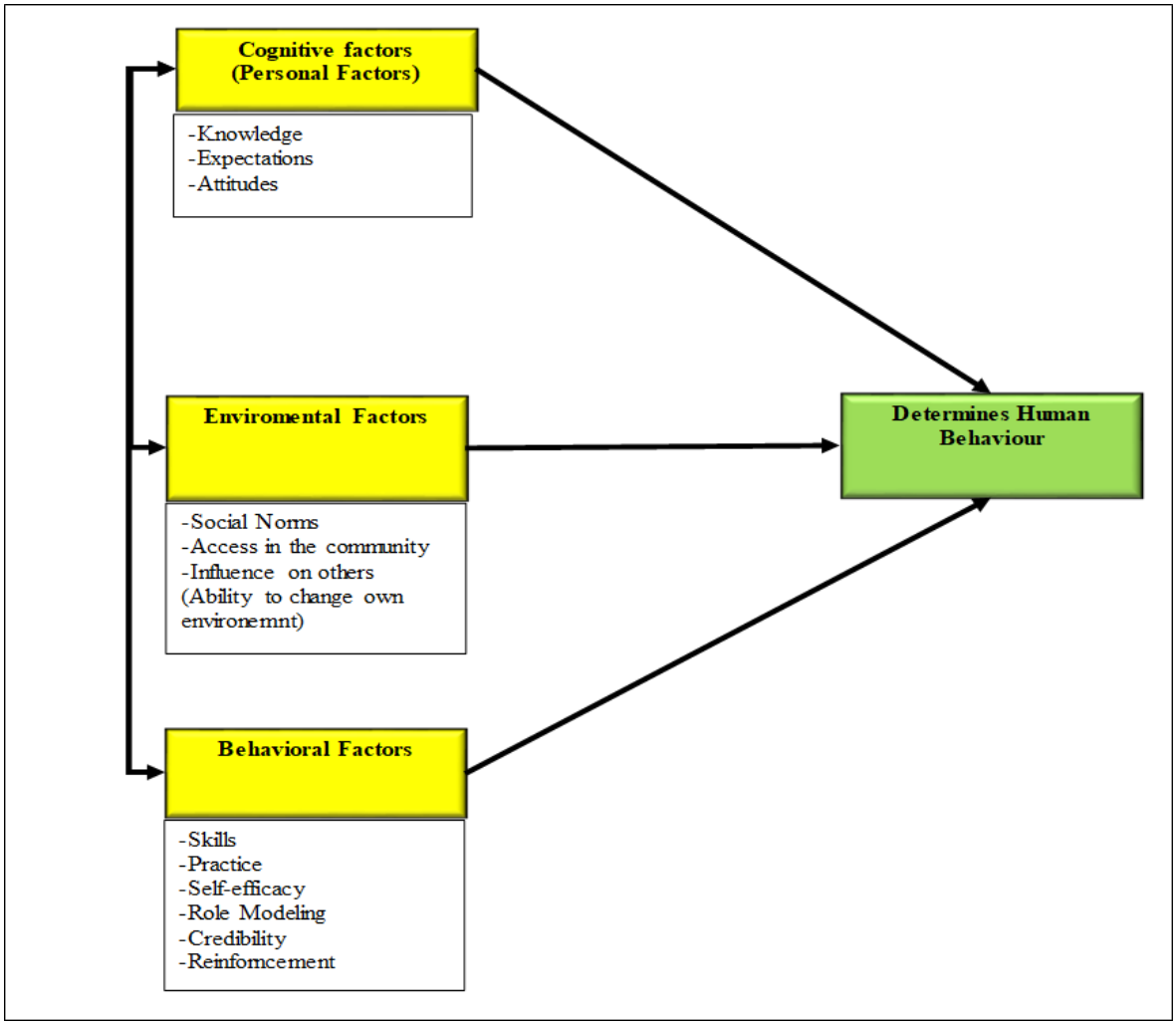

Figure 2.1: Social Learning Theory

(Bandura, 1986b).

2.15 Conclusion

In this chapter, the researcher discussed the literature relating HIV/AIDS peer education programme and defined peer education as a crucial strategy to distribute information and knowledge among the university context, furthermore to influence student's behaviour towards aids free generation and positive health style of living.

The researcher then looked at the duties of peer educators, the overview of HIV/AIDS pandemic around the world and in tertiary education, and the researcher also looked on the rate of HIV/AIDS at the University of KwaZulu-Natal where the study was conducted. The researcher further looked at the attitudes, perception and knowledge to PLWHIV. The researcher further looked at the government initiatives to prevent and control HIV/AIDS

The literature shows that the effectiveness of peer education programme and qualities of a good peer educator where it was stated that the programs have to be made to suit socio-demographic characteristics of the target audience. Then the researcher deliberated on the challenges in the implementation of HIV/AIDS prevention program. Then we finally linked peer education and social learning theory, where we discussed that Social Learning Theory is crucial in this study because its assist peer educators to determine why certain behaviours exist and why other activities are not very effective. Furthermore, the theory also promotes peer education to server as behaviour communication therapists due to its potential to access and because it impacts huge number of students in the university context.

3 CHAPTER THREE: METHODOLOGY

3.1 Introduction

The methods used in conducting this research is presented in this chapter. The research plan employed by the researcher to collect data is captured here. The study draws on in depth questionnaires conducted with peer educators and students. Furthermore, the procedures followed as well as tools used during the data collection process are also covered in this chapter.

3.2 Setting and context

The University of KwaZulu-Natal (UKZN) is in the province of KwaZulu-Natal in South Africa. This university (UKZN) came into existence on 1 January 2004 from the merger of two universities, the University of Durban-Westville and the University of Natal. The university has campuses in Durban and Pietermaritzburg. Those campuses are Edgewood, Nelson Mandela Medical School, Pietermaritzburg, Westville and Howard College campus. This study was carried out at the Howard College campus located on the Berea, in Durban. In the Howard College campus, a full range of degree programs are offered in different colleges. Participants of this study were selected from all colleges depending on the peer educator's social groups.

3.3 Research design and method

This study adopted a quantitative approach directed at exploring the perceptions and experiences of students towards HIV/AIDS peer education program. This was the best method to use because it is more exploratory, and it provides a complete, detailed description of HIV/AIDS peer education program. Furthermore, a quantitative research design was appropriate because it aims at collecting data that lead to reliable responses to important questions "reported in sufficient detail that has a meaning to the reader" (Sarantakos, 2012). Quantitative data have the following characteristic: data can be sorted, classified, and measured in an unbiased way, making their explanation definite and free from individual judgments. Also, a quantitative method is objective, and can be easily replicated (Sarantakos, 2012).

This survey involved the use of questionnaires to gather data about students' perceptions, attitudes, and behaviours. A cross sectional design was used because it describes what is happening at the present moment. In a cross sectional design, population that is statistically

important is used for estimation the relationship between an outcome of interest and a population variable as they exist at a specific time (Welman et al., 2005).

3.4 Sample and Sampling technique

The targeted sample of this study was 250 participants in total. However, the study only included 242 participants, 25 peer educators and 217 students comprising of 146 females and 46 males aged between 18 to 33 registered at the UKZN Howard College campus. Participants were drawn from students enrolled and registered at the University of KwaZulu-Natal, Howard College campus. Participants are peer educators and students (peer educators' social groups). Students who were peer educator's social groups were taken from different schools depending on each peer educator social demographic practices. A larger sample have been better in terms of validity and reliability. Only students who met the selection criteria of the study enrolled. Permission to collect data from students was sought from the Registrar, and the arrangement to meet and collect data from peer educators was obtained from the Campus HIV/AIDS Support Unit Coordinator. A larger sample would have been better in terms of validity and reliability.

3.5 Data Collection procedure

The survey was carried out for two weeks from 18 April 2018 to 2 May 2018. The questions were originally drawn in English. The researcher collected the data by means of questionnaires. Arrangements were made with CHASU's coordinator and the chairperson of peer educators to provide dates and time for meetings with peer educators. Meetings were held in Campus HIV/AIDS Support Unit's office (CHASU). Data was obtained with the aid of a questionnaire.

The data collection tool used was a questionnaire. Welman et al. (2015) defines a questionnaire as a collection of wisely organized questions, selected after testing, with the aim of eliciting dependable answers. The purpose of a questionnaire is to determine what a designated group do, think and or feel. Sarantakos (2012) revealed that questionnaires require less cost; they produce timely and reliable results, they also offer a great guarantee of anonymity and decreased chance of bias. Also, they can be filled at convenience of the respondent. Validity of data was done using factor analysis and the Cronbach's alpha analysis was also done to ascertain reliability of the study.

The instrument that was employed in this process was called "HIV/AIDS Knowledge, Attitude, and Behaviour Questionnaire (HAKABQ)", which is adopted from Cherian and Maphoso (2009). This questionnaire was used to assess knowledge, attitude as well as the behaviour of SAPS' peer educators in the province of Limpopo, South Africa. Therefore, the questionnaire has been approved and validated to be used in South Africa. This questionnaire consists of 52 items and covering the participants' socio-demography and knowledge, attitude, behaviour and perceptions of HIV/AIDS peer education.

3.6 Data Analysis

The data obtained was entered into Statistical Package of Social Sciences (SPSS). Then the data captured was cleaned to ensure that the capturing was correctly. The data was analysed by descriptive statistics. Details of the data analysis is presented in the following chapter.

3.7 Ethical considerations

The University of KwaZulu-Natal ethical review committee permitted the researcher to conduct the study amongst students and the gatekeeper's permission was obtained from the registrar. A meeting with the CHASU coordinator together with peer educators was held where the researcher fully explained the aims, objectives and the nature of the study. All raised questions were answered to clarify issues. Respondents were given consent forms to read and the after sign as a proof of their agreement to be enrolled. However, some of the respondents (more especially their social groups) opted to give verbal informed consent. Participants were guaranteed of secrecy and confidentiality. All the data collected is safely stored in a locked office in the University of KwaZulu-Natal where it would be kept for the duration of five years after which it would be disposed of.

4 CHAPTER FOUR: RESULTS

4.1 Introduction

The findings of this current study, data analysis and interpretation are presented in this chapter. Statistical tests were conducted which included factor loading analysis, descriptive statistics, correlation, t-test, one-way analysis of variance (ANOVA) and linear regression to produce conclusive results. The socio-demographics profile of the respondents is first presented, followed by the knowledge, attitude and behaviour of student towards HIV, and students' perceptions towards HIV/AIDS peer education program.

Validity of data was done using factor analysis. The main reason for this was to determine if the items on the data collection instrument measure particular aspects of stress and also if they converge. A factor loading Analysis score of 0.5 or greater is acceptable. The Cronbach's alpha analysis was also done to ascertain reliability of the study. In this study, Cronbach's alpha score ≥ 0.70 was considered statistically significant. Also shown is the skewness and kurtosis values, these values are also only statistically significant if less than 1.

4.2 Demographics

Table 4.1. Participant's demographics

	Variables	N (%)
Gender	Female	146 (60.3)
	Male	96 (39.7)
Marital status	Single	231 (95.5)
	Married	2 (0.8)
	Living with a partner	9 (3.7)
Race	African	234 (96.7)
	Indian	4 (1.7)
	Coloured	4 (1.7)
Academic level	Undergraduate	192 (79.3)
	Postgraduate	50 (20.7)
Peer educators	Yes	25 (10.3)

	No	217 (89.7)
Age (year)	21.1 (18 – 33)	

N = number, % = percentage

The table above represents the socio-demographics of participants in this study. They were 242 participants in this study; 146 were females representing 60% of the total population and 96 males representing 39.7% of the population. A great majority of participants, about 95.5 % in this study were single and 9 % of the study population were people living with a partner but not legally married. Married individuals constituted just 2% of the sample population. Also, a significant percentage of participants were people of African descent (96.7%), Indians were 4 % and the Coloureds constituted 4% of the total study population respectively. Classification of study participants based on the level of education showed that 79.3% them were undergraduates and the remaining 20.7% were postgraduates. Information obtained from the participants also showed that a great percentage (89.7) of these participants are not peer educators, only 10.3% of them are peer educators. Participants age range was between 18 to 33 (mean age is 21.1).

4.3 Knowledge of students about HIV/AIDS

Table 4.2. Factor loading on knowledge of student about HIV/AIDS

Categories and items	Factor loading	Alpha
1. Knowledge about route of HIV infection		
A person can contract HIV by sharing a glass of water with someone who is HIV positive.	0.78	0.83
Withdrawing the penis before a climax (ejaculates) prevents a woman from contracting HIV during sex.	0.73	
Condoms are less than fifty percent safe for the prevention of HIV/AIDS infection.	0.74	
Showering and washing your genitals after sex can reduce the chances of being infected with HIV.	0.71	
People are likely to contract HIV by deep kissing (putting their tongues in their partners' mouth if their partners are HIV positive).	0.70	
2. Knowledge regarding confidentiality and testing		
Do you think it is important for infected people to tell their sexual partners about their HIV status?	0.79	0.84
I know where and how I can do HIV testing and counselling, and the consequences of my testing.	0.86	

3. Knowledge about HIV spread from person to person		
Coughing and sneezing do not spread HIV.	0.77	0.84
Pregnant women infected with HIV will have babies infected with HIV.	0.79	

Table 4.2 presents results for the factor analysis and reliability test for the results obtained from respondents regarding their knowledge about HIV/AIDS. From the factor analysis conducted, the items on knowledge were divided into three groups namely: knowledge regarding the route of HIV infection, knowledge pertaining to confidentiality and testing, and knowledge about HIV spread from person to person.

Table 4.3. Descriptive Statistics for knowledge categories

	Number of items	**Mean ± SD**	**Skewness**	**Kurtosis**
Knowledge about route of HIV infection	5	9.0 ± 2.99	0.82	0.67
Knowledge regarding confidentiality and testing	2	8.45 ± 1.9	-1.70	0.31
Knowledge about HIV spread from person to person	2	5.70 ± 1.69	-0.39	0.74

SD = standard deviation

Table 4.3 presents the descriptive statistics for the various knowledge categories. The overall mean score of respondents regrading knowledge about HIV infection route, knowledge regarding confidentiality and testing as well as knowledge about the spread of HIV from person to person is presented.

Table 4.4. Respondents' response to individual items that make the knowledge categories.

Items	Strongly disagree		Disagree		Neutral		Agree		Strongly agree	
	N	%	N	%	N	%	N	%	N	%
A person can contract HIV by sharing a glass of water with someone who is HIV positive.	184	76.0	45	18.6	6	2.5	3	1.2	4	1.7
Withdrawing the penis before a climax (ejaculates) prevents a woman from contracting HIV during sex.	160	66.1	53	21.9	25	10.3	1	0.4	3	1.2
Condoms are less than fifty percent safe for the prevention of HIV/AIDS infection.	91	37.6	66	27.3	56	23.1	19	7.9	10	4.1
Do you think it is important for infected people to tell their sexual partners about their HIV status?	21	8.7	4	1.7	10	4.1	56	23.1	151	62.4
Showering and washing your genitals after sex can reduce the chances of being infected with HIV.	117	48.3	58	24.0	34	14.0	19	7.9	14	5.8
I know where and how I can do HIV testing and counselling, and the consequences of my testing.	22	9.1	6	2.5	5	2.1	82	33.9	127	52.5
People are likely to contract HIV by deep kissing (putting their tongues in their partners' mouth) if their partners are HIV positive.	99	40.9	66	27.3	52	21.5	17	7.0	8	3.3
Coughing and sneezing do not spread HIV.	19	7.9	32	13.2	26	10.7	75	31.0	90	37.2
All pregnant women infected with HIV will have babies infected with HIV.	114	47.1	73	30.2	29	12.0	9	3.7	17	7.0

N = number, % = percentage

Table 4.4 above shows the response of enrolled students on knowledge regarding HIV/AIDS. A great majority of participants in this study (76.0 %) strongly disagreed with the notion that a person (HIV negative) can become HIV positive by sharing of water with another person who is HIV positive, while 45 participants representing 18.6% they disagreed. Six participants (2.5%) remained neutral and on the question. Very few (1.2%) agreed to this. From the result it shows majority of the students (n=229) agreed to the fact the spread of the virus is not possible by just sharing of a glass of water.

On the question of retreating the penis before sexual climax to prevent a woman from getting infected with HIV, 160 participants representing 66.1 % strongly disagreed and 53 participants representing 21.9% disagreed. Twenty-five participants (10.3%) remained neutral on the question. Only one participant (0.4%) agreed and 3 (1.2%) strongly agreed. The summary of responses from this question shows a large number of the students (n=213) do not believe withdrawing the penis before a climax (ejaculates) can prevent infection with HIV during sex. Only a few of them (n= 4) think this can be a preventive measure.

About 37.6% of participants in this study (n=91) strongly disagreed that condoms may be less than 50% effective for protection for from HIV, and 66 of them (27.3%) disagreed. Although not a great majority but a significant number of the participants numbering 56 (23.1%) remained neutral on the issue. Very few participants think condoms are not effective in protecting against HIV. Results shows a good number of students agree condoms are an efficient means of halting the spread of HIV infection.

With regards to the question on importance of infected people disclosing HIV status to their partners, 151 (62.4%) of the participants strongly agreed, and 56 (23.1%) agreed. Ten of the respondents remain neutral to the question. Some of the participants do not think this is a good idea, about 21 (8.7%) strongly disagreed, and 4 (1.7%) disagreed. The response shows that most respondents (207) are in favour of HIV infected persons disclosing their status to their partners.

A great majority of participants numbering 117 (representing 48.3%) strongly disagreed with the notion that after an act of sex, showering and washing of the genital area could decrease the chance of HIV infection, while 58 (24.0%) disagreed. Thirty-four (14.0%) of the respondents remained neutral. Nineteen (7.9%) of the respondents agreed and 14 (5.8%) strongly agreed.

About knowing where and how to go regarding HIV testing and counselling, and the consequences of being tested, 127 (52.5%) strongly agreed and 82 (33.9%) agreed they know their way round being counselled and tested and the consequences that follows. Five (2.1%) of the respondents remained neutral, while 22 (9.1%) strongly disagreed and 6 (2.5%) disagreed they know their way round getting counselled and tested and the consequences that follows. This shows that a great majority of the enrolled respondents (n= 209) are knowledgeable about the process of being tested and its importance.

A good number of the respondents (n=165) do not believe HIV can be contracted by deep kissing even when one of the partners is HIV positive, 99 of the respondents (40.9%) strongly disagreed and 66 (27.3%) disagreed. Fifty-two (21.5%) of the respondents remained neutral on this issue, while 17 (7.0%) of the participants strongly agreed and 8 (3.3%) strongly disagreed.

Regarding coughing and sneezing not being a means of spreading HIV, 90 (37.2%) of the respondents strongly agreed and 75 (31.0%) agreed. Twenty-six (10.7%) of the respondents remained neutral. Thirty-two (13.2%) of the respondents disagreed and 19 (7.9%) strongly disagreed.

Results from this study shows 114 (47.1%) of the participants strongly disagreed and 73 (30.2) disagreed that HIV infected pregnant women give birth to babies that are also infected with HIV. Twenty-nine (12.0%) remained neutral, 17 (7.0%) strongly agreed to this and 9 (3.7%) agreed.

Table 4.5. Pearson product-moment correlations coefficients for knowledge categories

		1	2	3
1.	Knowledge about route of HIV infection	1.00		
2.	Knowledge regarding confidentiality and testing	-0.24**	1.00	
3.	Knowledge about HIV spread from person to person	-0.009	0.014	1.00

********Significant at 0.01 level*

The table (Table 4.5) above displays the Pierson correlation coefficient to determine the relationship between the knowledge regarding the route of HIV infection, knowledge regarding about confidentiality and testing, and knowledge about HIV spread from person to person. This was done to assess the degree of association among the measured variables. From the result obtained, there was a significant correlation between knowledge about the route of HIV

infection and knowledge about confidentiality and testing (P <0.01). The correlation between knowledge regarding the route of HIV infection as well as knowledge regarding confidentiality and testing were not significantly correlated to knowledge about HIV spread from person to person.

Table 4.6. Difference in knowledge mean scores with regards to gender of respondents.

Measure	Gender	Mean ± SD	DF	T-value	P-value
Knowledge about route of HIV infection	Female	8.54 ± 2.86	240	-2.97	0.003*
	Male	9.69 ± 3.1			
Knowledge about confidentiality and testing	Female	8.55 ± 2.01	240	0.77	0.44
	Male	8.35 ± 1.72			
Knowledge about HIV spread from person to person	Female	5.42 ± 1.48	240	-3.37	0.001*
	Male	6.11 ± 1.66			

SD = standard deviation, DF = degree of freedom

The mean knowledge score of the respondents regarding their level of knowledge based on gender is presented in table 4.6. The male respondents mean knowledge score about route of HIV infection is 9.69 ± 3.1 and significantly elevated ($p<0.05$) than that of the female respondents which 8.54 ± 2.86. The male respondents mean knowledge score (6.11 ± 1.66) about HIV spread from person to person is also statistically higher ($p<0.05$) than that in the females (5.42 ± 1.48). There was no difference ($p>0.05$) in the female mean knowledge score (8.55 ± 2.01) about confidentiality and testing compared to that of the males (8.35 ± 1.72).

Table 4.7. Difference in knowledge mean scores with regards to academic level of respondents.

Measure	Gender	Mean ± SD	DF	T-value	P-value
Knowledge about route of HIV infection	undergraduate	9.10 ± 2.94	240	0.63	0.22
	Postgraduate	8.76 ± 3.15			
Knowledge about confidentiality and testing	undergraduate	8.49 ± 1.90	240	0.38	0.80
	Postgraduate	8.38 ± 1.93			
Knowledge about HIV spread from person to person	undergraduate	5.74 ± 1.60	240	0.89	0.94
	Postgraduate	5.72 ± 1.57			

SD = standard deviation, DF = degree of freedom

Table 4.7 presents the mean knowledge score of the respondents based on their academic level. The undergraduate respondents mean knowledge score about route of HIV infection is 9.10 ± 2.94 did not show any difference ($p>0.05$) when compared to that of the postgraduate students which is 8.76 ± 3.15. The undergraduate respondents mean knowledge score about confidentiality and testing (8.49 ± 1.9) did not differ ($p>0.05$) from that of the postgraduate students (8.38 ± 1.93). There was also no difference ($p>0.05$) in the undergraduate students' knowledge level (5.74 ± 1.60) about the spread of HIV from person to person compared to that of the post graduate students (5.72 ± 1.57).

Table 4.8. Difference in knowledge mean scores with regards to age of respondents

Measure	**Age (yrs)**	**Mean ± SD**	**F-value**	**Df**	**P-value**
Knowledge about route of HIV infection	18 – 23	9.10 ± 3.00	1.19	239	0.42
	24 – 28	8.60 ± 2.69			
	29 – 33	8.46 ± 1.80			
Knowledge about confidentiality and testing	18 – 23	8.41 ± 1.96	1.03	239	0.36

	24 – 28	9.00 ± 1.00			
	29 – 33	8.47 ± 1.73			
Knowledge about HIV spread from person to person	18 – 23	5.69 ± 1.60	0.86	239	0.42
	24 – 28	5.58 ± 0.84			
	29 – 33	6.60 ± 1.95			

SD = standard deviation, DF = degree of freedom

Table 4.8 presents one-way ANOVA results among the various age brackets of the respondents. As it is shown in the table above, there was no difference in the knowledge of respondents to the route of HIV infection, confidentiality and testing and HIV spread from person to person when the age of the respondents is taken into consideration ($p>0.05$).

Table 4.9 Regression analysis of knowledge categories and knowledge about the use of condoms

Variable	**β**	**T**	**Sig**	**95% CI**	
				LL	**UL**
Knowledge about route of HIV infection	0.21	10.20	0.001**	0.17	0.25
Knowledge about confidentiality and testing	-0.04	-1.10	0.29	-0.15	0.03
Knowledge about HIV spread from person to person	-0.03	-0.72	0.47	-0.09	0.05

***Statistical significance (p<0.001); β= beta; CI= confidence interval; LL= lower limit; UL= upper limit*

A linear regression analysis was done with knowledge variables to determine the predictive value of condom use associated with knowledge regrading HIV. The outcomes display that knowledge about confidentiality and testing ($t=-1.10$, $p>0.05$) and knowledge about HIV spread from person to person ($t=-0.72$, $p>0.05$) were not statistically significant. However, the knowledge about route of HIV infection ($t=10.20$, $p=0.001$) was statistically significant, meaning that this knowledge contributes to condom use among respondents.

4.4 Attitude and behaviour of student about HIV/AIDS

Table 4.10. Factor loading on attitude and behaviour of student towards HIV/AIDS

Categories and items	Factor loading	Alpha
1. Attitude and behaviour towards HIV testing		
I have done an HIV test in the past year	0.73	0.81
If I do HIV testing, people will discriminate against me if they find that I am HIV positive	0.89	
I do not want to do testing because the person who conducts the testing will make my results known	0.71	
I can die earlier if I know that I am HIV positive than if I do not know my HIV status	0.70	
2. Attitude and behaviour to practicing protective sex		
A condom is not necessary when you and your partner agree not to have sex with anyone else	0.78	0.83
Using a condom shows my partner that I care about him/her	0.73	
I use condom during sex	0.82	
Using a condom takes the "wonder" of sex	0.78	
3. Relationship and socialization		
HIV-negative students should not be allowed to socialize with HIV-positive students	0.76	0.78
I talk with my sexual partner about HIV/AIDS before having sex with him/her	0.82	
I only have sex with people who had an HIV test	0.79	
I only have sex with an HIV negative partner, who only has sex with Me	0.74	
I avoid risky sexual partners	0.77	
4. Involvement with HIV awareness program		
I usually attend HIV/AIDS meetings, workshops and seminars	0.75	0.83
I want to be involved with HIV/AIDS activities	0.77	

Table 4.10 present results for the factor analysis and reliability test for the results obtained from respondents regarding their attitude and behaviour towards HIV/AIDS. From the factor

analysis conducted, the items on attitude and behaviour towards HIV/AIDS were divided into four groups namely: attitude and behaviour towards HIV testing, attitude and behaviour to practicing protective sex, relationship with socialization and Involvement with HIV awareness program.

Table 4.11. Descriptive Statistics for behaviour and attitude categories

	Number of items	Mean ± SD	Skewness	Kurtosis
Attitude and behaviour towards HIV testing	4	10.7 ± 2.8	0.44	0.54
Attitude and behaviour to practicing protective sex	4	12.4 ± 2.1	0.13	0.50
Relationship and socialization	5	15.5 ± 3.3	0.09	0.22
Involvement with HIV awareness program	2	6.6 ± 2.1	-0.055	-0.65

SD = standard deviation

Table 4.11 presents the descriptive statistics for the various attitude and behaviour categories. The overall mean score of respondents regarding attitude and behaviour towards HIV testing, attitude and behaviour towards practicing protective sex, relationship and socialization as well as involvement with HIV awareness program is presented.

Table 4.12. Respondents' response to individual items that make the knowledge categories.

Items	Strongly disagree		Disagree		Neutral		Agree		Strongly agree	
	N	**%**	**N**	**%**	**N**	**%**	**N**	**%**	**N**	**%**
I have done an HIV test in the past year	25	10.3	16	6.6	2	0.8	72	29.8	127	52.5
If I do HIV testing, people will discriminate against me if they find that I am HIV positive	38	15.7	51	21.1	83	34.3	53	21.9	17	7.0
I do not want to do testing because the person who conducts the testing will make my results known	114	47.1	80	33.1	23	9.5	10	4.1	15	6.2
I can die earlier if I know that I am HIV positive than if I do not know my HIV status	131	54.1	54	22.3	25	10.3	9	3.7	23	9.5
A condom is not necessary when you and your partner agree not to have sex with anyone else	109	45.0	84	34.7	19	7.9	17	7.0	13	5.4
Using a condom shows my partner that I care about him/her	14	5.8	25	10.3	17	7.0	71	29.3	115	47.5
I use condom during sex	7	2.9	9	3.7	76	31.4	76	31.4	74	30.6
Using a condom takes the "wonder" of sex	55	22.7	51	21.1	82	33.9	33	13.6	21	8.7
HIV-negative students should not be allowed to socialize with HIV-positive students	173	71.5	21	8.7	2	0.8	4	1.7	42	17.4
I talk with my sexual partner about HIV/AIDS before having sex with him/her	22	9.1	31	12.8	84	34.7	57	23.6	48	19.8
I only have sex with people who had an HIV test	24	9.9	55	22.7	86	35.5	43	17.8	34	14.0

I only have sex with an HIV negative partner, who only has sex with me	15	6.2	41	16.9	100	41.3	45	18.6	41	16.9
I avoid risky sexual partners	15	6.2	9	3.7	46	19.0	74	30.6	98	40.5
I usually attend HIV/AIDS meetings, workshops and seminars	43	17.8	65	26.9	47	19.4	48	19.8	39	16.1
I want to be involved with HIV/AIDS activities	6	2.5	24	9.9	71	29.3	67	27.7	74	30.6

N = number, % = percentage

The table above shows the response of the enrolled students on attitude and behaviour towards HIV/AIDS. A good number of the participants, about 127 (52.5%) strongly agreed to the statement "I have done an HIV test in the past year", 72 (29.8%) agreed and 25 (10.3%) strongly disagreed. Only 2 (0.8%) of the respondents remained neutral to the statement and did not give their response.

A good number of the participants, about 83 (34.3%) remained neutral to the statement "if I do HIV testing, people will discriminate against me if they find that I am HIV positive". 51 (21.1%) disagreed and 38 (15.7%) strongly disagreed. However, 53 (21.9%) of the respondents agreed while 17 (7.0%) strongly agreed that people will discriminate against them if the test positive.

Additionally, about 114 students (47.1%) strongly disagreed, 80 (33.1%) disagreed. Also, 23 (9.5%) of the respondents remained neutral to the question. Furthermore, 10 (4.1%) agreed and 15 (6.2%) strongly agreed that they are reluctant to go for testing for the reason that the person responsible for conducting the test may make the outcome of their test known to others.

Results from response that to whether they think they can die earlier if they are confirmed as being HIV positive than if they do not know their HIV status, 131 (54.1%) of them strongly disagreed, 54 (22.3) disagreed. In addition, 25 (10.3%) of the respondents remained neutral to the statement. Nevertheless, 23 respondents (9.5%) strongly agreed and 9 (3.7%) agreed.

On the statement "a condom is not necessary when you and your partner agree not to have sex with anyone else", 109 (45%) strongly disagreed, 84 (34.7%) disagreed, 19 (7.9%) remained neutral, 17 (7%) agreed and 13 (5.4%) of the respondents strongly agreed.

Responses regarding the statement "using a condom shows my partner that I care about him/her", 14 (5.8%) of the participants who strongly disagreed and 25 (10.3%) who disagreed.

A significant number of the respondents, 115 (47.5%) strongly agreed, 71 (29.3%) agreed and 17 (7.0%) remained neutral.

Regarding the use of condoms during sex, 76 (31.4%) of the respondents remained neutral to the question, 76 (31.4%) agreed, 74 (30.6%) strongly agreed. Correspondingly, 9 (3.7%) of the respondents disagree and 7 (2.9%) strongly disagreed.

On the statement "using a condom takes the "wonder" of sex", 55 (22.7%) of the participants strongly disagreed and 51 (21.1%) disagreed. A significant number of the respondents, 82 (33.9%) remained neutral on this statement.

About allowing HIV-negative students to socialize with HIV-positive students, a great majority of the students, about 173 (71.5%) strongly disagreed and 21 (8.7%) disagreed. Also, 2 (0.8%) of the respondents remained neutral to the statement. Nevertheless, 42 respondents (17.4%) strongly agreed and 4 (1.7%) agreed that HIV negative students must not be permitted to socialize with students that are HIV positive.

On the statement "I talk with my sexual partner about HIV/AIDS before having sex with him/her", 22 (9.1%) strongly disagreed, 31 (12.8%) disagreed, and 84 (34.7%) remained neutral. On the other hand, 57 (23.6%) of the participants agreed while 48 (19.8%) strongly agreed that they communicate well with their partners about HIV before engaging in sexual act.

A reasonable number of the respondents, about 86 (35.5%) remained neutral on the statement "I only have sex with people who had an HIV test" Whereas 24 (9.9%) of the participants strongly disagreed, 55 (22.7%) disagreed, 43 (17.8%) agreed and 34 (14.0%) strongly agreed.

Results from the "I only have sex with an HIV negative partner, who only has sex with me" statement, 100 (41.3%) of the respondents remained neutral, 45 (18.6%) agreed, 41 (16.9%) strongly agreed. However, 41 (16.9%) of the respondents disagreed and 15 (6.2%) strongly disagreed.

On the statement "I avoid risky sexual partners" 100 (41.3%) of the respondents strongly agreed, 84 (34.7%) agreed and 37 (15.3%) remained neutral to the question. However, 12 (5.0%) of the respondents strongly disagreed and 9 (3.7%) disagreed.

On the statement "I usually attend HIV/AIDS meetings, workshops and seminars", 43 (17.8%) of the respondents strongly disagreed, 65 (26.9%) disagreed, 47 (19.4%) remained neutral. A total of 48 (19.8%) agreed to the statement and 39 (16.1%) strongly agreed.

On the statement "I want to be involved with HIV/AIDS activities", 71 (29.3%) of the respondents remained neutral, 67 (27.7%) agreed, and 74 (30.6%) strongly agreed.

Table 4.13. Pearson product-moment correlations coefficients for behaviour and attitude variables

		1	2	3	4
1.	Attitude and behaviour towards HIV testing	1.00			
2.	Attitude and behaviour to practicing protective sex	0.19**	1.00		
3.	Relationship and socialization	0.20**	0.23**	1.00	
4.	Involvement with HIV awareness program	-0.09	0.10	0.29**	1.00

********Significant at 0.01 level*

The table above (Table 4.13) shows the Pearson correlation coefficient to determine the relationship between attitude and behaviour towards HIV testing, attitude and behaviour towards practicing protective sex, relationship and socialization as well as involvement with HIV awareness. This was done to assess the degree of the association between the measured variables. Result obtained showed a significant correlation between attitude as well as behaviour of respondents towards HIV testing and attitude and behaviour towards practicing protective sex ($p < 0.05$). Also, a positive correlation was seen between relationship and socialization with attitude and behaviour towards HIV testing and attitude and behaviour towards practicing protective sex respectively ($p<0.05$). Involvement with HIV awareness program was only correlated to relationship and socialization ($p<0.05$).

Table 4.14. Difference in attitude and behaviour mean scores with regards to gender of respondents.

Measure	Gender	Mean ± SD	DF	T-value	P-value
Attitude and behaviour towards HIV testing	Female	10.71 ± 3.0	240	-0.074	0.20
	Male	10.74 ± 2.5			
	Female	12.3 ± 2.1	240	-1.12	0.22

Attitude and behaviour to practicing protective sex	Male	12.6 ± 1.9			
Relationship and socialization	Female	15.8 ± 3.5	240	1.97	0.02*
	Male	14.95 ± 2.9			
Involvement with HIV awareness program	Female	6.6 ± 1.96	240	0.006	0.09
	Male	6.6 ± 2.18			

SD= standard deviation, DF = degree of freedom

Table 4.14 presents the mean attitude and behaviour score of the respondents based on their gender. The female respondents mean attitude and behaviour towards HIV testing (10.71 ± 3.0) was not different ($p>0.05$) from that of the males (10.74 ± 2.5). Also, the female respondents mean attitude and behaviour towards the practice of safe sex (12.3 ± 2.1) did not show any difference ($p>0.05$) compared to that of the males (12.6 ± 1.9). The female respondents' response to relationship and socialization (15.8 ± 3.5) was statistically important ($p<0.05$) likened to that in the males (14.95 ± 2.9). Regarding the attitude and behaviour towards involvement with HIV awareness program, there was no difference ($p>0.05$) in the response of the females (6.6 ± 1.96) compared to that in the males (6.6 ± 2.18).

Table 4.15. Difference in attitude and behaviour mean scores with regards to academic level of respondents.

Measure	Gender	Mean ± SD	DF	T-value	P-value
Attitude and behaviour towards HIV testing	Undergraduate	10.8 ± 2.8	240	1.44	0.73
	postgraduate	10.2 ± 2.57			
Attitude and behaviour to practicing protective sex	Undergraduate	12.43 ± 2.0	240	-0.39	0.47
	postgraduate	12.4 ± 2.3			
Relationship with socialization	Undergraduate	15.4 ± 3.4	240	-0.31	0.51
	postgraduate	15.5 ± 3.1			
Involvement with HIV awareness program	Undergraduate	6.4 ± 1.99	240	-3.41	0.59
	postgraduate	7.50 ± 2.07			

SD= standard deviation, DF = degree of freedom

Table 4.15 presents the mean attitude and behaviour score of the respondents based on their academic level. The undergraduate respondents mean attitude and behaviour towards HIV testing (10.8 ± 2.8) was not different (p>0.05) from that of the postgraduates (10.2 ± 2.57). Also, undergraduate respondents mean attitude and behaviour towards the practice of safe sex (12.43 ± 2.0) did not show any difference (p>0.05) compared to that of the postgraduate (12.4 ± 2.3). The undergraduate respondents' response to relationship and socialization (15.4 ± 3.4) was not significant (p>0.05) compared to that in the postgraduate (15.5 ± 3.1). Regarding the attitude and behaviour towards involvement with HIV awareness program there was no difference (p>0.05) in the response of the undergraduate (6.4 ± 1.99) compared to that in the males (7.50 ± 2.07).

Table 4.16. Difference in attitude and behaviour mean scores with regards to age of respondents.

Measure	Age (yrs)	Mean ± SD	F-value	Df	P-value
Attitude and behaviour towards HIV testing	18 – 23	10.8 ± 2.8	2.71	239	0.07
	24 – 28	10.4 ± 2.8			
	29 – 33	8.0 ± 0.0			
Attitude and behaviour to practicing protective sex	18 – 23	12.5 ± 2.1	0.99	239	0.38
	24 – 28	12.3 ± 1.5			
	29 – 33	11.2 ± 1.8			
Relationship with socialization	18 – 23	15.3 ± 3.2	3.96	239	0.02*
	24 – 28	17.2 ± 3.9			
	29 – 33	17.4 ± 2.1			
Involvement with HIV awareness program	18 – 23	6.4 ± 2.0	12.7	239	0.000**
	24 – 28	8.2 ± 1.6			
	29 – 33	9.4 ± 0.89			

SD= standard deviation, DF = degree of freedom

Table 4.16 presents the attitude and behaviour mean scores one-way ANOVA results among the various age brackets of the respondents enrolled. As it is shown in the table above, there was no observable difference in attitude and behaviour scores of respondents across all age groups with regards to attitude and behaviour towards HIV testing, attitude and behaviour towards practicing protective sex, relationship and socialization as well as involvement with HIV awareness program (p>0.05).

Table 4.17. Regression analysis of respondent's attitude and behaviour variables with the use condoms.

Variable	B	T	Sig	95% CI	
				LL	UL
Attitude and behaviour towards HIV testing	0.11	4.8	0.001**	0.65	0.15
Attitude and behaviour to practicing protective sex	0.24	8.1	0.001**	0.19	0.31
Relationship with socialization	0.017	0.85	0.39	-0.022	0.06
Involvement with HIV awareness program	-0.045	-1.44	0.15	-0.11	0.02

***Statistical significance (p<0.001); β= beta; CI= confidence interval; LL= lower limit; UL= upper limit*

A linear regression analysis was done with attitude and behaviour variables to determine the predictive value of condom use associated with attitude and behaviour towards HIV/AIDS. The results show that attitude and behaviour towards HIV testing (t=4.8, p=0.0001) and attitude and behaviour to practicing protective sex (t=8.1, p=0.001) were significant. However, the relationship with socialization (t=0.85, p=0.39) was and involvement with HIV awareness program (t=-1.44, p=0.15) were not significant.

4.5 Students' perceptions towards HIV/AIDS peer education program

Table 4.18. Factor loading on Students' perceptions towards HIV/AIDS peer education program.

Categories and items	Factor loading	Alpha
1. Peer educators as role models		
Peer educators mix well with other students hence can positively influence Them	0.75	0.71
Peer educators are role models and their behavioural pattern is positively influential to other students	0.77	
Peer educators are respected by other students	0.79	
Some people have been protected from getting infected with the HIV virus by having HIV/AIDS education	0.74	
2. Peer education and information dissemination		
Peer educators share information with other students with regard to HIV/AIDS	0.70	0.72
Peer educators are regarded by other students as more knowledgeable about HIV/AIDS	0.71	
Peer educators are students who can express themselves hence are listened to by fellow students	0.82	
Peer educators are friendly to other students hence students feel free to ask about HIV/AIDS	0.70	
Peer educators must be given the opportunity to address their fellow students whenever they have	0.75	
3. Incorporation of peer education in the university system		
Education on HIV/AIDS through peer education is a programme to be recommended in the University	0.72	0.76
The peers' education sessions are worthwhile to attend	0.70	
Since peer educators have learned about HIV/AIDS they have the opportunity to inform others about how to protect themselves from getting infected	0.73	
The University should continue with peer education to bring about HIV/AIDS awareness	0.70	

Table 4.18 presents results for the factor analysis and reliability test for the results obtained regarding students' perceptions towards HIV/AIDS peer education program. From the factor analysis conducted, the items students' perceptions towards HIV/AIDS peer education program were divided into three groups namely: peer educators as role models, peer education and information dissemination and incorporation of peer education in the university system.

Table 4.19. Descriptive Statistics for perception of students about HIV/AIDS peer education program.

	Number of items	Mean ± SD	Skewness	Kurtosis
Peer educators as role models	4	15.7 ± 2.40	0.065	-0.49
Peer education and information dissemination	5	20.2 ± 2.98	-0.35	0.19
Incorporation of peer education into university setting	4	17.6 ± 2.20	-0.97	0.32

SD = standard deviation

Table 4.19 presents the descriptive statistics for the various categories of students' perceptions towards HIV/AIDS peer education program. The overall mean score of respondents regarding peer educators as role models, peer education and information dissemination and incorporation of peer education in the university system is presented.

Table 4.20. Respondents' response to individual items that make the perception of students about HIV/AIDS peer education program categories.

Items	Strongly disagree		Disagree		Neutral		Agree		Strongly agree	
	N	%	N	%	N	%	N	%	N	%
Peer educators mix well with other students hence can positively influence them	2	0.8	7	2.9	45	18.6	111	45.9	77	31.8
Peer educators share information with other students regarding HIV/AIDS	3	1.2	6	2.5	30	12.4	116	47.9	87	36.0
Peer educators are regarded by other students as more knowledgeable about HIV/AIDS	17	7.0	47	19.4	113	46.7	65	26.9	65	26.9
Peer educators are role models and their behavioural pattern is positively influential to other students	1	0.4	16	6.6	73	30.2	86	35.5	66	27.3
Peer educators are respected by other students	1	0.4	15	6.2	94	38.8	81	33.5	54	21.1
Peer educators are students who can express themselves hence are listened to by fellow students	0	0.0	11	4.5	61	25.2	122	50.4	48	19.8
Peer educators are friendly to other students hence students feel free to ask about HIV/AIDS	1	0.4	7	2.9	49	20.2	114	47.1	71	29.3
Peer educators must be given the opportunity to address their fellow students whenever they have	1	0.4	6	2.5	17	7.0	123	50.8	95	39.3
Some people have been protected from getting infected with the HIV virus by having HIV/AIDS education	3	1.2	8	3.3	26	10.7	109	45.0	96	39.7
Education on HIV/AIDS through peer education is a programme to be recommended in the University	1	0.4	5	2.1	16	6.6	89	36.8	131	54.1
The peers' education sessions are worthwhile to attend	1	0.4	3	1.2	45	18.6	100	41.3	93	38.4
Since peer educators have learned about HIV/AIDS they have the opportunity to inform others about how to protect themselves from getting infected	1	0.4	5	2.1	14	5.8	109	45.0	113	46.7
The University should continue with peer education to bring about HIV/AIDS awareness	0	0.0	2	0.8	8	3.3	60	24.8	172	71.1

N = number, % = percentage

The table above shows the perception of students to HIV/AIDS peer education program. The total number of participants in the study was 242. A great majority of the participants, about

111 (45.9%) agreed to that “peer educators mix well with other students hence can positively influence them”, 77 (31.8%) strongly agreed while 45 (18.6%) remained neutral. Only 2 (0.8%) of the respondents strongly disagreed and 7 (2.9%) disagreed.

With regards “peer educators share information with other students with regard to HIV/AIDS”, 116 (47.9%) agreed, 87 (36.0%) agreed, and 30 (12.4%) remained neutral. Six (2.5%) of the respondents disagree and 3 (1.2%) strongly disagree.

On the question if “peer educators are regarded by other students as more knowledgeable about HIV/AIDS”, 17 (7.0%) strongly disagreed, 47 (19.4%) disagreed, and 113 (46.7%) remained neutral. Also, 65 (26.9%) of the study respondents agreed while 65 (26.9%) strongly agreed that peer educators are regarded by students to have a sound knowledge about of HIV/AIDS.

Student responses regarding peer educators as role models and their behavioural pattern positively influencing other students shows 86 (35.5%) who agreed and 66 (27.3%) who strongly agreed. 73 (30.2%) of the respondents remained neutral. 16 (6.6%) of the students disagreed and just 1 (0.4%) strongly disagreed.

On the question if “peer educators are respected by other students”, 1 (0.4%) strongly disagreed, 15 (6.2%) disagreed, and 94 (38.8%) remained neutral. Also, 81 (35.5%) of the respondents agreed and 54 (21.1%) strongly agreed that peer educators are respected by students.

Responses regarding “peer educators are students who can express themselves hence are listened to by fellow students”, 11 (4.5%) disagreed, and 61 (25.2%) remained neutral. Additionally, 122 (50.4%) of the respondents agreed and 48 (19.8%) strongly agreed that peer educators are students who can clearly communicate and are heard by fellow students.

With regards to student responses from the statement “peer educators are friendly to other students hence students feel free to ask about HIV/AIDS”, 1 (0.4%) strongly disagreed, 7 (2.9%) disagreed, and 49 (20.2%) remained neutral. Also, 114 (47.1%) of the respondents agreed and 71 (29.3%) strongly agreed that peer educators are friendly to students.

Responses from students regarding “peer educators must be given the opportunity to address their fellow students whenever they have” shows 123 (50.8%) of those who agreed and 95

(39.3%) of those who strongly agreed. Also, 17 (7.0%) of the respondents remained neutral, 6 (2.5%) of the students disagreed and just 1 (0.4%) strongly disagreed.

From the statement "some people have been protected from getting infected with the HIV virus by having HIV/AIDS education", 109 (45.0%) agreed, 96 (39.7%) strongly agreed, 26 (10.7%) of the respondents remained neutral, 8 (3.3%) of the students disagreed and 3 (1.2%) strongly disagreed.

On the recommendation for "education on HIV/AIDS through peer education as a programme in the university", 1 (0.4%) strongly disagreed, 5 (2.1%) disagreed, and 16 (6.6%) remained neutral. Also, 89 (36.8%) of the respondents agreed and 131 (54.1%) strongly agreed that peer education programme should be incorporated in the university system.

Student responses from the question if peers' education sessions are worthwhile to attend shows 100 (41.3%) who agreed, 93 (38.4%) who strongly agreed, 45 (18.6%) of the respondents who remained neutral, 3 (1.2%) of the students who disagreed and just 1 (0.4%) who strongly disagreed.

From the statement "since peer educators have learned about HIV/AIDS they have the opportunity to inform others about how to protect themselves from getting infected", 109 respondents (45.0%) agreed, 113 (46.7%) strongly agreed, 14 (5.8%) remained neutral, 5 (2.1%) disagreed and 1 (0.4%) strongly disagreed.

On the statement that "the university should continue with peer education to bring about HIV/AIDS awareness", 2 respondents (0.8%) disagreed, and 8 (3.3%) remained neutral, 60 (24.8%) agreed and 172 (71.1%) strongly agreed.

Table 4.21. Pearson product-moment correlations coefficients for perception of students about HIV/AIDS peer education program

		1	2	3
1.	Peer educators as role models	1.00		
2.	Peer education and information dissemination	0.73**	1.00	
3.	Incorporation of peer education into university setting	0.53**	0.55**	1.00

********Significant at 0.01 level*

Table 4.21 shows the Pearson correlation coefficient to determine the relationship between peer educators as role models, peer education and information dissemination and incorporation of peer education in the university system. This was done to assess the degree of the association among the measured variables. Result obtained shows a significant correlation ($p<0.05$) between peer educators being role models to their peers and peer education and the dissemination of information. Also, a significant correlation was seen ($p<0.05$) between peer educators as role models and incorporation of peer education in the university system as well as between peer education and information dissemination and incorporation of peer education in the university system ($p<0.05$).

Table 4.22. Difference in perception of students about HIV/AIDS peer education program with regards to gender of respondents.

Measure	Gender	Mean ± SD	DF	T-value	P-value
Peer educators as role models	Female	15.9 ± 2.5	240	0.90	0.36
	Male	15.6 ± 2.4			
Peer education and information dissemination	Female	20.4 ± 3.0	240	1.27	0.20
	Male	19.9 ± 3.0			
Incorporation of peer education into university setting	Female	17.7 ± 2.0	240	1.31	0.19
	Male	17.4 ± 2.4			

SD= standard deviation, DF = degree of freedom

The mean perception score of the respondents about HIV peer educators with regards to gender is presented in table 4.22. The female respondents mean perception score about HIV peer educators as role models is15.9 ± 2.5 and was not significantly higher ($p>0.05$) than that of the male respondents which is 15.6 ± 2.4. The female respondents mean perception score about HIV peer education been a means of information dissemination is 20.4 ± 3.0 and was not significantly higher ($p>0.05$) than that of the male respondents which is 19.9 ± 3.0. There was also no difference ($p>0.05$) in the mean perception score of females (17.7± 2.0) and male (17.4 ± 2.4) respondents regarding the incorporation of peer education into the university setting.

Table 4.23. Difference in perception of students about HIV/AIDS peer education program With regards to academic level of respondents.

Measure	Gender	Mean ± SD	DF	T-value	P-value
Peer educators as role models	undergraduate	15.7 ± 2.4	240	0.09	0.92
	Postgraduate	15.7 ± 2.5			
Peer education and information dissemination	undergraduate	20.3 ± 3.0	240	0.42	0.67
	Postgraduate	20.1 ± 3.1			
Incorporation of peer education into university setting	undergraduate	17.6 ± 2.1	240	0.58	0.56
	Postgraduate	17.4 ± 2.4			

SD= standard deviation, DF = degree of freedom

The mean perception score of the respondents about HIV peer educators with regards to academic level is presented in table 4.23. The undergraduate respondents mean perception score about HIV peer educators as role models is15.7 ± 2.4 and was not significantly higher ($p>0.05$) than that of the postgraduate respondents which was 15.7 ± 2.5. The undergraduate respondents mean perception score about HIV peer education being a means of information dissemination was 20.3 ± 3.0 and was not significantly higher ($p>0.05$) than that of the postgraduate respondents which was 20.1 ± 3.1. There was also no difference ($p>0.05$) in the mean perception score of undergraduate (17.6 ± 2.1) and postgraduate (17.4 ± 2.4) respondents regarding the incorporation of peer education into the university setting.

Table 4.24. Difference in perception of students about HIV/AIDS peer education program with regards to age of respondents

Measure	Age (yrs)	Mean ± SD	F-value	Df	P-value
Peer educators as role models	18 – 23	15.7 ± 2.4	3.08	239	0.04*
	24 – 28	16.2 ± 2.7			
	29 – 33	18.2 ± 1.5			
Peer education and information dissemination	18 – 23	20.1 ± 3.0	3.38	239	0.03*
	24 – 28	21.5 ± 2.2			
	29 – 33	22.4 ± 1.9			
Incorporation of peer education into university setting	18 – 23	17.5 ± 2.2	4.02	239	0.01*
	24 – 28	18.6 ± 1.6			

	29 – 33	19.2 ± 1.3

SD= standard deviation, DF = degree of freedom

Table 4.24 presents students perception about HIV peer educators taking the age of respondents into consideration. As it is shown in the table above, a significant difference in the perception score of the participants about HIV peer educators as role models ($p<0.05$). The respondents within the age bracket of 18 – 23 years had a higher mean perception score compared to the other age brackets. It was also observed that there exists a significant difference in the mean perception score of participants about HIV peer education as a means of information dissemination ($p<0.05$), with the 18 – 23 age brackets having the highest score. Same was also observed with reference to the obtained response of the participants to the incorporation of peer education into the university setting, the 18 – 23 age brackets had the highest score ($p<0.05$).

Table 4.25. Regression analysis of perception of students about HIV/AIDS peer education program and facilitation of HIV awareness by peer educators

Variable	B	T	Sig	95% CI	
				LL	UL
Peer educators as role models	0.13	5.15	0.001*	0.08	0.18
Peer education and information dissemination	0.04	0.18	0.85	-0.04	0.04
Incorporation of peer education into university setting	0.14	6.0	0.001*	0.10	0.19

***Statistical significance (p<0.001); β= beta; CI= confidence interval; LL= lower limit; UL= upper limit*

A linear regression analysis was done with student perception about peer educator's variables to determine the predictive value of facilitation of HIV awareness by peer educators associated with perception of students about peer educators. The results show that perception of peer educators as role models (t=5.15, p=0.001) and perception of students about incorporation of peer education into university setting (t=6.0, p=0.001) were statistically significant. However,

the perception of students about peer education and information dissemination (t=0.18, p=0.85) was not significant.

Table 4.26. Regression analysis of perception of students about HIV/AIDS peer education program and support received from fellow students

Variable	B	T	Sig	95% CI	
				LL	UL
Peer educators as role models	0.05	2.6	0.001*	0.01	0.90
Peer education and information dissemination	0..22	13.5	0.001*	0.19	0.30
Incorporation of peer education into university setting	-0.05	-2.9	0.001*	-0.09	-0.02

***Statistical significance (p<0.001); β= beta; CI= confidence interval; LL= lower limit; UL= upper limit*

A linear regression analysis was done with student perception about peer educators variables to determine the predictive value of HIV/AIDS peer education program and support received from fellow student**s** associated with perception of students about peer educators. The results show that perception of peer educators as role models (t=2.6, p=0.001) and perception of students about incorporation of peer education into university setting (t=-2.9, p=0.001) were statistically significant. Also, the perception of students about peer education and information dissemination (t=13.5, p=0.001) was statistically significant.

4.3 Conclusion

This chapter has covered the key findings of the study undertaken at Howard College. The students and peer educators sampled presented varying knowledge, attitude, perceptions and opinions about issues surrounding hiv/aids peer education. This study confirmed that the participants feel that peer educators must be given the opportunity to address their fellow students whenever the opportunity present itself. This shows that peer educators have a decent understanding of good sexual behaviours and can transfer this knowledge to their peers. This study has also showed that aides the belief that peer educators influence their peers, there is also the belief that peer educators' action have helped save so many from being infected with HIV.

5 CHAPTER FIVE: DISCUSSION

5.1 General overview

In South Africa, the prevalence HIV is notable among the youths, and this makes development and implementation of an active program to halt HIV spread among the youth an important policy as well as a great public health priority. It is not abnormal to find that young people are more at risk of getting infected. This is because they are prone to practices such as; having unprotected intercourse with same sex or the opposite sex, Intravenous (IV) drug-use etc. Also, youths in this age group are easily exploited thus lending support to increase infection rate found in this population (Maimaiti et al., 2010, Harrison et al., 2010).

This study was designed to figure out variation in the level of knowledge, the attitude, as well as behaviour and perception of the enrolled students about HIV peer educators. The results of this study will be discussed under four headings as mentioned earlier.

5.2 Knowledge of student about HIV/AIDS

In the current study, assessing general knowledge of 242 students enrolled towards HIV/AIDS is relatively high. This is reflected in the responses of the students to the individual questions to determine their knowledge level. The knowledge score of the participants was calculated on 9 items grouped into three variables using factor analysis namely: knowledge about the route of HIV infection, knowledge about confidentiality and testing, and knowledge about HIV spread from person to person (Table 4.2). The overall knowledge score mean was 36.59 ± 0.16. The minimum score is 23.0 and the maximum score is 45.0.

Assessing the knowledge of participants in this study about the route of HIV infection showed that most of the respondents had a decent knowledge with regards to the route through one can get infected. This study outcome is in alignment with that by a previous study (Haroun et al., 2016). In this study, a significant population of the participants demonstrated that the route of infection of the virus is not by encountering infected people or items from infected people. However, the results show that the students believe contact with infected body fluids such as during sex is a route of infection. This is evidenced in their responses which suggest that withdrawing the penis before climax during intercourse is not a preventive measure.

Very few of the students responded positively to condoms as effective means preventing HIV/AIDS. This means there is need to educate students on condom use during sex and its capacity to prevent infection. Pinyaphong et al. (2018) revealed that young university students enrolled in their study were not consistent with condoms use. The use of condoms should be promoted at an early age of onset of sexual activity; this will help to inculcate a safe sex habit in the young people and thereby improving the use of condom (Pinyaphong et al., 2018).

Most of the enrolled students disregard the belief that washing and showering of one's genitals after sexual contact can lessen the probabilities of infection. In this regard, 48.3% of sample students strongly disagreed and 24.0% sample students disagreed with this myth. This may probably be due to the knowledge of students on HIV infection route because once the virus gains entry into the bloodstream through body fluids, washing the genitals will not get rid of the infection. Studies has shown that post coital washing does stop the spread of HIV, and is not a means of protection against HIV infection (Makumbi et al., 2016).

As mentioned earlier regarding the knowledge of the enrolled students been relatively high, this is further confirmed by the responses of the students to the statement "people are likely to contract HIV by deep kissing (putting their tongues in their partners' mouth if their partners are HIV positive)". Majority of the respondents (68.2 %) do not believe people may become infected with HIV by engaging in deep kissing with a partner that is HIV positive. This may be due to the fact that though HIV is found in body fluids, but the concentration in the saliva is negligible. Contact between broken skin, wounds, or mucous membranes and HIV-infected blood or blood contaminated body fluids. Deep, open mouth kissing if both partners have sores or bleeding gums and blood from the HIV positive partners gets into the bloodstream of the HIV negative partner. Therefore HIV is not spread through saliva. Furthermore in the case where one of the partners have bleeding gums or wound in the mouth this may be a risk factor.

With respect to knowledge about confidentiality and testing, most respondents (85.5 %) accept infected people and supported the idea that they should reveal their status to their sexual partners. This is important as it will help the partner if not already infected to engage in using protection or if infected to seek medical attention to manage infection. The spread of HIV can be reduced drastically if HIV infected people disclose their status to their partners. There is need for disclosure of status and also need to address behaviours of the infected persons afterwards to curtail HIV spread (O'Connell et al., 2015). Also, students' knowledge on confidentiality and testing was further confirmed by their knowledge of where and how to get

HIV counselling and testing and the consequences that follows. This result shows that the enrolled respondents are conscious about the need to get counselled and tested, and also, they are aware of the importance of this. The accessibility of HCT centres on campus is critical and recommended to help in the fight against HIV spread (Woldeyohannes et al., 2017).

Further asking questions to determine the level of respondents on the means of HIV spread from one person to the other shows that a great number of the students do not believe sneezing and coughing spreads HIV. This may be due to their knowledge knowing HIV infection is not a communicable infection. This result can be corroborated by findings by Ali et al. (2018). Deficient knowledge about the means of HIV transmission can be addressed by organising consistent interactive seminars that are directed towards HIV/AIDS (Ali et al., 2018).

Lastly on knowledge of the participants towards HIV spread, results from this study shows most of the participants disagreed that pregnant women who are infected with the virus (HIV) will give birth to infected babies. This may be due to the knowledge that if pregnant women are carefully managed, they will give birth to HIV free babies. It is common now to find in most health care settings programs designed for halting transmission of HIV from mother to the child (Landefeld et al., 2018).

On the impact of respondent demographics on the level of knowledge, it was noticed that age as well as academic level did not make any difference in the level of knowledge of the respondents. However, it was observed males had a higher mean score knowledge about rote of HIV infection and HIV spread from person to person. Though this may have arisen as a result of the sampling adopted. Also, the result of linear regression analysis was done with knowledge variables to determine the predictive value of condom use related with knowledge about HIV/AIDS. Results show that knowledge of respondents about route of HIV infection ($t=10.20$, $p=0.001$) was significant, meaning that this knowledge contributes to condom use among respondents.

5.3 Attitudes and behaviour of student towards HIV/AIDS

This study tried to evaluate the attitude and behaviour of students towards HIV, and this was calculated on 15 items grouped into four variables using factor analysis namely: attitude and behaviour towards HIV testing, attitude and behaviour towards practicing protective sex, relationship and socialization as well as involvement with HIV awareness (Table 4.10). The results obtained from the current study shows that the overall attitudes and behaviour score is

quite high and far above average (35.1 ± 6.2). This can be seen in the response of the students to the individual questions to determine their attitude and behaviour towards HIV. The minimum score is 12.0 and the maximum score is 50.0.

With regards to the correlation of variables under attitude and behaviour towards HIV, results obtained shows a good association between attitude and behaviour towards HIV testing and attitude and behaviour towards practicing protective sex. There was also positive correlation between relationship and socialization with attitude and behaviour towards HIV testing and attitude and behaviour towards practicing protective sex respectively. This further confirms that the respondents had an impressive attitude and behaviour towards HIV.

It was observed that a good number of the respondents (82.3%) responded positively that they obligated to be tested in the previous year. This is encouraging as it brings to mind that the students are conscious of the fact that the need to know their HIV status and this will help them to live positively. It has been reported that facilitators that promote routine HIV testing includes frequent educational and enlightenment programs, an updated testing protocol, and also the incorporation of reminders in the process (Tan and Black, 2018). In order to encourage people to voluntarily get tested, there needs to be a system in place that boosts the confidence of the populace to get tested as this will eradicate HIV stigma (Kelly et al., 2016)

Stigmatization against people with HIV remains very high and a critical issue. It has been reported that in places where people stigmatize against HIV, it is unlikely that people will embrace going to get tested (Kelly et al., 2016, Young et al., 2010). Responses to the question "if I do HIV testing, people will discriminate against me if they find that I am HIV positive" showed a significant number of participants who abstained from responding (34.3%) with only a few in support of testing regardless of what people think if they test positive (21.1% disagreed and 15.7% strongly disagreed). It is not abnormal to see that a good number of the respondents abstained from answering the question and also believe they will be discriminated against if they test and their HIV status is known. One of the barrier to voluntary counselling and testing is stigmatization (Kelly et al., 2016, Young et al., 2010).

Regard getting tested and the issue of trust relating to who conducts the test, a good number of participants (47.1% strongly disagreed and 33.1% disagreed) do not subscribe to the fact that they abstain from getting tested or going for testing due to the person who is responsible for conducting the test and are not scared the person will make their results known to others. This

bestows confidence on the system because most of the counsellors and people conducting the test are trained to keep issues relating to client's status a secret and maintain a high level of confidentiality.

This study further investigated the attitude and behaviour of the participants toward HIV and the response gotten so far is encouraging as the responses to the statement "I can die earlier if I know that I am HIV positive, then if I do not know my HIV status" were mostly positive. Results from this question shows a significant number of the respondents (54.1% strongly disagreed and 22.3% disagree) who demonstrated good attitude towards HIV. This is because knowing your HIV status will help you to manage your health and live positively thereby living longer than when you do not know. This therefore shows that people should be encouraged to go and test and know their HIV status as well as living positively. An important component of prevention of HIV spread is HIV testing. Through testing, counselling can be given to people who are negative to live a good life and also about risk-reduction strategies like the use of protection (condom). Also if people test positive, early introduction of anti-retroviral therapy (ART) can help in treatment as well as a decrease risk of secondary transmission (Kelly et al., 2016).

Also, the result of this study shows most of the responds support safe sex. This can be seen from their responses to the statement "a condom is not necessary when you and your partner agree not to have sex with anyone else". Far more than half the number of the respondents (45% strongly disagreed and 34.7% disagreed) do not think this is correct. This response is encouraging and there is need for condom use as this prevent STI as well as unplanned pregnancy (Higgins and Wang, 2015). Most of the respondents in this study (47.5% strongly agreed and 29.3% agreed) believe that using a condom will make their partner believe that they care. However, a very few do not agree with this. On the statement "people who use condoms sleep around a lot", more than half the percentage of the respondents do not agree to this (32.2% of the participants strongly disagreed and 24.0% disagreed). Research by Higgins and Wang (2015) examined the attitude of youths to condom use; they tried to determine if condom use cause decreased pleasure during sex and also how this affects safe practices using condom. This study was done in young people aged 15- to 24-years. They recommended that research as well as interventions be constantly done to evaluate and address the attitude of the young about condom use and how it affect the desired pleasure (Higgins and Wang, 2015). This study

also found that attitude and behaviour towards HIV testing and attitude and behaviour to practicing protective sex contributes significantly to the use of condoms

In trying to determine the attitude and behaviour towards condom use during sex, the results show that most of the participants have a positive behaviour to condom use (31.4% agreed and 30.6% strongly agreed). This is consistent with discoveries by Kuete et al. (2016) who also found in their study that majority of the enrolled students believe that condoms make sexual relationship safe. Results from this study also show that a good number of the respondents (30.6% agreed and 40.5% strongly agreed) said they avoid risky sexual partners. Avoiding risky behaviour and risky sexual partners serves as a wall of defence and helps to lessen the danger of infection. When asked if the use of condom for protection takes the "wonder" love making, the number of respondents who strongly disagree and disagree added together was 106 (43.8%), still a significant number of the respondents (33.9%) remained neutral and abstained from responding, only a few agreed to this. When it comes to condom use, there still exist an uphill task to make people embrace its use wholeheartedly. It is important to lay emphasis on condom use and the pleasure-enhancing benefits so as to bring about a shift in social norms in the society as regards the use of condoms (Pinyaphong et al., 2018).

Being infected with HIV has no effect on the social life of the person. People infected and living with HIV (PLWHIV) do have normal life in all ramifications (Haroun et al. (2016). This has been confirmed by the responses of the enrolled students to the statement "HIV-negative students should not be allowed to socialize with HIV-positive students". A good number of the students (71.5% strongly disagree and 8.7% disagree) do not see any problem in socializing with PLWHIV. This is very positive and encouraging. The attitudes of the society to PLWHIV have greatly improved and has become more tolerant compared to the past. There is a drop in the level of fear of uninfected people to become infected though there still exist a stigma directed at people infected with HIV. However, there is generally an improved level of socialization with PLWHIV (Plantin et al., 2017).

Most of the respondents in this study (23.6% of the enrolled participants agreed and 19.8% strongly agreed) that they discuss about HIV before engaging in sexual acts with their partners. However, a good number of the respondents (34.7%) remained neutral on the statement "I talk with my sexual partner about HIV/AIDS before having sex with him/her". It is essential for partners to communicate with each other regarding HIV/AIDS, this will help increase awareness and help them indulge in safe sex practices. Research conducted by Farthing et al.

(2016) has shown that the frequency of communication among partners about HIV/AIDS and sex influences Partner-to-Partner Pre-exposure Prophylaxis Education.

Still on the determining the behaviour of the students towards HIV, it was observed that most of the students did not have multiple sexual partners. These percentages together are far above average and its very encouraging and a positive attitude towards HIV. This finding can also be corroborated with findings by Petros et al. (2017). Research has shown that sex with numerous people is a great risk factor implicated in contracting HIV and other infections that are sexually transmitted (Ashenhurst et al., 2017).

On the question "I only have sex with people who had an HIV test", it was observed that a higher fraction of the respondents (35.5%) remained neutral. Results show that the number of respondents that are in favour (17.8% agreed and 14.0% strongly agreed) and not in favour (9.9% of the participants strongly disagreed and 22.7% disagreed) of the question are almost same. The response of the students to this question is divergent and a positive conclusion cannot be drawn. The results obtained from the question "I only have sex with an HIV negative partner, who only has sex with me" shows this may not be the case because of the number of respondents who remained neural to the question. The 41.3% of the respondents remained neutral to the question, this is a significant percentage of the total study population, but only a few responded positively.

Results show that a very high percentage far above average (41.3% of the respondents strongly agreed and 34.7% agreed) avoid risky sexual partners. This is a confirmation of the positive behaviour of the enrolled participants to HIV. Risky behaviours pose a great danger to the health of an individual, and at the same time also it is a threat to the health of the public in general. The choices individuals make are vital and they may or may not promote risky behaviours. When one risk his/her health there are consequences which may not be reversible (de Walque, 2014).

Assessing the participants on self-education and development as regards attending HIV/AIDS meetings, workshops and seminars, it was observed that though the number of participants that accept the try to develop themselves and those who said they did not take it into consideration were almost same but the numbers favour respondents who disagreed with the question. Self-education is important, this will keep one abreast with current development. It is important to

continuously organise seminars and workshops on HIV/AIDS to update the current knowledge, this will help to keep the target audience enlightened (Ali et al., 2018).

On the statement "I want to be involved with HIV/AIDS activities" a good number of the respondents (27.7% agreed and 30.6% strongly agreed) show their willingness to be involved in activities aimed at preventing HIV spread or creating awareness. The fight against HIV is a collective one and everyone is a stakeholder. It is important for individuals and the community as a whole to be involved in health campaigns (MacQueen et al., 2015).

5.4 Students' perceptions towards HIV/AIDS peer education program

This study also examined the perception of the enrolled students about HIV/AIDS peer education. From the factor analysis result, the items on students' perceptions towards HIV/AIDS peer education program were divided into three groups namely: peer educators as role models, peer education and information dissemination and incorporation of peer education in the university system. The perception score was calculated on 13 items. The overall perception towards HIV/AIDS peer educators score mean was 62.0 ± 7.4, the minimum score is 31.0 and the maximum score is 75.0. From the obtained results, participant perception score towards HIV/AIDS peer educators can be said to be quite impressive.

The result obtained in this study confirms that there exists significant correlation ($p<0.05$) in all three categories of students' perception to HIV peer education program. It was observed in the study that the age group 18 – 23 had the highest perception about HIV peer educators. This probably may be because they are more active group than the others. Regression analysis also shows that the enrolled participants had a good perception about peer educators as role models, importance of peer education in information dissemination and incorporation of peer education into university setting. This may help to boost HIV awareness and increase the support students need as regards HIV education.

The use of peer educators has been often exploited to educate people and prevent the spread of HIV and other STIs. The importance of a well-grounded and sound sexuality health education cannot be over emphasised, this does not only help to prevent sexually transmitted diseases or unwarranted pregnancy among the youth population, but helps to educate the young and save them from the consequences ignorance (Medley et al., 2009, O'Malley et al., 2017).

From the obtained results, most of the participants accept peer educators as people who can interact well with others. Results show that a good number of the respondents responded positively (45.9% agreed and 31.8% strongly agreed) to the statement "peer educators mix well with other students hence can positively influence them". The individuals who are trained as peer educators are select persons who share similar demographic features or risk behaviours to that of a target population. They are trained to raise awareness, share information, help instil values and encourage positive behavioural change in a given population (Medley et al., 2009).

Regarding the dissemination of information by peer educators, it was observed that most of the enrolled students responded positively to the statement "peer educators share information with other students with regard to HIV/AIDS", (47.9% agreed and 36.0% agreed to this). It is known that peer education involves sharing and impacting of useful health values and giving information to educate people of same similar social status. Research by Adeomi et al. (2014) has shown that peer educators are important and one of the core components needed to improve knowledge on HIV as well as help improve the attitude of people. Peer educators help to improve preventive practices among the youths and adolescent population (Adeomi et al., 2014).

In the present study, respondents were asked if "peer educators are regarded by other students as more knowledgeable about HIV/AIDS", and majority of the students agreed to this. Also, the students were asked if they see peer educators as role models and if their behavioural pattern positively influence other students, the results obtained shows a great majority of the students believe peer educators are role models and their way of life has a strong impact on the other students. It has been shown that if place under sufficient supervision and training, students will not only be agents of change in their schools or immediate surroundings but will also form a line of defence against behaviours that lead to destruction. This therefore shows that peer educators are not just role models of their peers attitude but also role models of behaviour for their peers (Abdi and Simbar, 2013, Adeomi et al., 2014).

The responses gotten from students in this study shows that "peer educators are respected by other students" and also "peer educators are students who can express themselves hence are listened to by fellow students". Also, it was observed that most of the students think "peer educators are friendly to other students hence students feel free to ask about HIV/AIDS". Studies have shown that peer education is an active method that can be used enlighten students on dangerous sexual behaviour related to HIV/AIDS. In addition, studies have also shown that

these peer educators are considered by their peers to be experienced and knowledgeable on the subject matter. Thus, they are consulted and listened to by their peers when it has to do with knowledge, attitudes, as well as practices, and this helps to propagate knowledge and experience as regards sexual education. There are numerous benefits attached to peer education and one of this is the impartation of reasoning and behavioural modifications which helps in preventing unsafe practices (Ali et al., 2015, Ibrahim et al., 2012, Layzer et al., 2014a).

The perception of the enrolled students about HIV peer educators can further be confirmed to be decent from the result obtained when the question "peer educators must be given the opportunity to address their fellow students whenever they have" was asked. The results show that around 90 % of the enrolled students (50.8% agreed and 39.3% strongly agreed) support peer educators to be given the opportunity to talk to their colleagues when the opportunity present itself. Research results have shown that peer educators have decent understanding of perfect sexual behaviours and can communicate or impart this knowledge to their peers. Also, peer educators can communicate to their audience (peers) in a soft and persuasive manner which goes a long way in bringing about change in behaviours. Another way by which peer educators can impart knowledge in a digital era is by the use of technology to teach their peers or show them the way to go as regards certain behaviours. Technology can provide peer educators with valuable interface to educate their peers on critical sexual health matters (Ali et al., 2015, O'Malley et al., 2017).

Peer education involving young people has helped to educate the interested ones on issues relating to HIV/AIDS and suggestion has revealed that peer educators have a strong impact on their peers and this has saved a lot of youths the consequences of their risky behaviour. It has been said that young people are greatly influenced by their peers' way of life (Frantz, 2015). This therefor goes to confirm the results obtained in this study when the question "some people have been protected from getting infected with the HIV virus by having HIV/AIDS education", results shows a very large percentage (45.0% agreed and 39.7% strongly agreed) subscribe to this notion.

On the question if "education on HIV/AIDS through peer education is a programme to be recommended in the university", results show that a good number of the enrolled population (36.8% of the respondents agreed and 54.1% strongly agreed) strongly believe peer education programme should be incorporated in the university system. Research has shown that there is the need to have efficient programs in place to combat HIV spread and one way to achieve this

in the young population is through peer education. In schools, the use of peer educators to promote sexual health and HIV/AIDS awareness should be given priority as using this means of health promotion has proven to be very effective in enlightening the young population (Frantz, 2015, Geneau and Hallen, 2012).

This study results have also shown that students think peer education sessions are worthwhile to attend as the get well enlightened and exposed to current trends and knowledge regarding HIV. Most of the enrolled participants in this study (41.3% agreed and 38.4% strongly agreed) agreed to the fact that peer education sessions are of great value. Results from this current study have also shown that a great majority of the enrolled students (45.0% agreed and 46.7% strongly agreed) are in line with peer educators been afforded the opportunity to inform others on means of protecting themselves from HIV infection since they have learned about HIV/AIDS. Peer educators when well-equipped are indispensable and they can be used to achieve set goals like health care professionals and using peer educators is not as expensive as using health providers to educate people on HIV/AIDS. Since the young people feel comfortable in the presence of their peers than health professionals, peer-based interventions can be fully employed to tackle HIV/AIDS epidemic (Menna et al., 2015, Tolli, 2012).

Finally, on the issue if "the university should continue with peer education to bring about HIV/AIDS awareness", result show majority of the students enrolled in this study (24.8% of the respondents agreed and 71.1% strongly agreed) agreed to it that peer education program should continue to be part of the university system to bring about HIV/AIDS awareness. This is not far from the fact that HIV/AIDS enlightenment taking the form of a school-based health education is an effective means of preventing HIV from spreading in the young population. Well trained peer educators are core basis of programs directed at preventing the HIV spread in the youth from time past (Layzer et al., 2014b).

6 CHAPTER SIX: CONCLUSION AND RECOMMENDATION

6.1 Conclusion

This study has been able to establish the knowledge level of university students towards HIV, though relatively high. There is still the need to invest in enlightenment programs to and raise awareness of HIV/AIDS in the young population. The results obtained from this study has showed that students are aware of the route and means through which HIV infection can spread. However, there is a great need to educate the young people on the need to engage in safe sex practice especially the use of protection. This study revealed that the enrolled students are not consistent with the use of condom during intercourse. Condom use should be encouraged and engaging in unprotected sex with the aim of withdrawing during climax should be discouraged.

In a place where stigmatization is almost not there, the disclosure of ones' status will not be a problem. Participants in this study favour the disclosure of HIV status to partners as this can help to address HIV spread. Laws can be put in place by various governments to stop stigmatization against people with HIV and people should be enlightened that testing positive is not the end of the road. This will encourage the disclosure of HIV status to partners. Also, this can be achieved by the accessibility of standard counselling as well as testing centres.

Taking the assessment of the students attitude into consideration, this study was able to point out that people are still reluctant to test because of the existence of stigma, which has been shown by other studies to be a barrier to voluntary counselling and testing (Kelly et al., 2016, Young et al., 2010). The respondents may be reluctant to getting tested, but they still show confidence in the system due to a high level of confidentiality. The respondents in this study though may not have shown a positive knowledge to condom use, but their attitude to the use of condom to an extent is commendable. Emphasis on condom use and the pleasure-enhancing benefits is important to change social norms associated with the use of condoms.

This study has also established that being infected with HIV has no effect on the social life. There is need to put in place programs that help in the evaluation of existing knowledge and making recommendations to meet up with modern trends about HIV/AIDS. Assessing the behaviour of students towards HIV showed that the frequency of HIV testing among the participants is quite high. This study was also able to show that the level of communication

between partners though crucial in Partner-to-Partner Pre-exposure Prophylaxis Education is not the case with participants in this study. This study has shown that there exists the need for self-education and development to acquire more knowledge about HIV/AIDS. Self-education will help to keep people in tune with current development.

There is a need for partners to be sure about their status as this will help them to better protect themselves. It is important to avoid risky behaviour and risky sexual partners so as not to break the wall of defence this sets up. Everyone is a stakeholder in the prevention of HIV spread. This has been shown in this study. Everyone needs to be involved and living in a way worthy of emulation is important for all stakeholders.

This study has shown that the confidence on HIV peer educators is quite high and they are indispensable in the global fight against HIV/AIDS. The results of this study showed that peer educators are well trained in communication and disseminating information to their target audience. Responses from this study has also shown that majority of the students consider peer educators as role models and their behavioural pattern positively influence other students. Peer educators have a solid impact on attitude and behaviour of their peers.

There is a need for a robust peer education program in institutions of higher learning. This will not only help to curtail the spread of HIV among the young student population but also will help to model youths with good characters and knowledge. Using peer educators to promote sexual health and HIV/AIDS awareness is an invaluable tool in enlightening the young population.

In this study it has been acknowledged that sexual behaviour is influenced by the interplay of many factors, such as socioeconomic and sociocultural factors in sexual decision making. This decision making process often has little to do with maintaining good health and more to do with satisfying motivational needs that have a psychological basis or with options that are socially or economically or emotionally determined. Therefore, an effective HIV/AIDS prevention strategy must also consider these specific factors that also contribute in perpetuating the transmission of HIV rather than focusing only on the use of condoms and many other preventive strategies. It is anticipated that findings from this study will help improve HIV prevention interventions targeting young people in South Africa. This study has contributed in the detection of crucial topics of discussion in the area of HIV/AIDS peer education among specific groups of people. In this case peer education has been deeply explored and the

researcher has come up with some recommendations in order to address gaps which have been revealed by the research.

6.2 Recommendation

From the obtained results in this study, regardless of the impressive knowledge of respondents about the route of HIV transmission, it is still evident that very few practices safe sex by using condoms. This therefore warrants the need to proper educate students on the importance of condom use as this will prevent HIV infection and STIs. Safe sex should be promoted at very early age of when individuals start becoming sexually active. In order to promote awareness and knowledge about HIV, individuals should be encouraged to engage in self-education to boost their capacity about HIV/AIDS. Self-education will help to keep people abreast with recent developments. Effective communication between sexually active partners should encouraged, as this is critical in Partner-to-Partner Pre-exposure Prophylaxis Education.

Responses from the current study also revealed that a good number of those enrolled considered peer educators as role models and their behavioural pattern positively influence other students. Peer educators have a strong influence on attitude and behaviour of their peers.

This study confirmed that participants feel that peer educators must be given the opportunity to address their fellow students whenever the opportunity present itself. This study has also showed that aides the belief that peer educators influence their peers, there is also the belief that peer educators' action have helped save so many from being infected with HIV.

There is need for a robust peer education program in institutions of higher learning. This will not only help to halt the transmission of HIV among the youth student population but also, it will help to model youths with good characters and knowledge. Using peer educators to promote sexual health and HIV/AIDS awareness is an invaluable tool in enlightening the young population.

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8 APPENDIX I

UNIVERSITY OF KWAZULU-NATAL
INYUVESI YAKWAZULU-NATALI

27 March 2018

Ms Happiness N Mazibuko 216071609
School of Applied Human Sciences - Psychology
Howard College Campus

Dear Ms Mazibuko

Protrocol Reference Nunber: HHS/2001/017m
Project title: Exploring the perceptions and experiences of students towards HIV/AIDS peer education program at the University of KwaZulu-Natal, Howard College Campus.

Full Approval – Full Committee Reviewed Protocol

In response to your application received 19 October 2017, the Humanities & Social Sciences Research Ethics Committee has considered the abovementioned application and the protocol has been granted **FULL APPROVAL.**

Any alteration/s to the approved research protocol i.e. Questionnaire/Interview Schedule, Informed Consent Form, Title of the Project, Location of the Study, Research Approach and Methods must be reviewed and approved through the amendment /modification prior to its implementation. In case you have further queries, please quote the above reference number.

PLEASE NOTE: Research data should be securely stored in the discipline/department for a period of 5 years.

The ethical clearance certificate is only valid for a period of 3 years from the date of issue. Thereafter Recertification must be applied for on an annual basis.

I take this opportunity of wishing you everything of the best with your study.

Yours faithfully

.....
Professor Shenuka Singh (Chair)
Humanitities & Social Sciences Research Ethics Committee

/pm

cc Supervisor: Mr M Hlengwa
cc Academic Leader Research: Professor Jean Steyn
cc School Administrators: Ms Ayanda Ntuli

Humanities & Social Sciences Research Ethics Committee
Dr Shenuka Singh (Chair)
Westville Campus, Govan Mbeki Building
Postal Address: Private Bag X54001, Durban 4000
Telephone: +27 (0) 31 260 3587/8350/4557 **Facsimile:** +27 (0) 31 260 4609 **Email:** ximbap@ukzn.ac.za / snymanm@ukzn.ac.za / mohunp@ukzn.ac.za
Website: www.ukzn.ac.za

9 APPENDIX II

UNIVERSITY OF KWAZULU-NATAL
INYUVESI YAKWAZULU-NATALI

21 August 2017

Miss Happiness Nokukhanya Mazibuko (SN 216071609)
School of Applied Human Sciences
College of Humanities
Howard College Campus
UKZN
Email: khanyomwelase@gmail.com Hlengwam1@ukzn.ac.za

Dear Miss Mazibuko

RE: PERMISSION TO CONDUCT RESEARCH

Gatekeeper's permission is hereby granted for you to conduct research at the University of KwaZulu-Natal (UKZN), towards your postgraduate degree, provided Ethical clearance has been obtained. We note the title of your research project is:

"Exploring the perceptions and experiences of students towards HIV/AIDS peer education program at a selected University in KwaZulu-Natal Province".

It is noted that you will be constituting your sample by handing out questionnaires to registered students on the Howard College campus.

Please ensure that the following appears on your notice/questionnaire:

- Ethical clearance number;
- Research title and details of the research, the researcher and the supervisor;
- Consent form is attached to the notice/questionnaire and to be signed by user before he/she fills in questionnaire;
- gatekeepers approval by the Registrar.

You are not authorized to contact staff and students using 'Microsoft Outlook' address book. Identity numbers and email addresses of individuals are not a matter of public record and are protected according to Section 14 of the South African Constitution, as well as the Protection of Public Information Act. For the release of such information over to yourself for research purposes, the University of KwaZulu-Natal will need express consent from the relevant data subjects. Data collected must be treated with due confidentiality and anonymity.

Yours sincerely

MR SS MOKOENA
REGISTRAR

10 APPENDIX III

LETTER OF ACCESS

The Registrar

I am a Masters student at the University of KwaZulu-Natal in school of Applied Human Sciences, discipline of Psychology hereby request permission to conduct a study together with students. I am conducting a research study within the University of Kwa-Zulu Natal (Howard College) entitled: Exploring the perceptions and experiences of students towards HIV/AIDS peer education program at the University of KwaZulu Natal, Howard College Campus. Ethical clearance has already been sorted from the UKZN ethics committee and awaiting results. Privacy and confidentiality of participants will always be maintained .

I intend to conduct quantitative research by distributing questionnaire with the participants to obtain rich in-depth information and perceptions of the students in relation to the topic. The questionnaire will be handed to the respondents and the researcher personally will collect the questionnaires from the respondents. Questionnaires will be kept confidential and stored in a safe place I would like to assure you that, student's names will not be used to protect their identities.

For more information and queries about the above information, please contact me on khanyomwelase@gmail.com or 072 4589826.

Regards

_____

Miss Nokukhanya Mazibuko

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UKZN HUMANITIES AND SOCIAL SCIENCES RESEARCH ETHICS COMMITTEE (HSSREC)

APPLICATION FOR ETHICS APPROVAL
For research with human participants

1. INFORMED CONSENT RESOURCE TEMPLATE

Note to researchers: Notwithstanding the need for scientific and legal accuracy, every effort should be made to produce a consent document that is as linguistically clear and simple as possible, without omitting important details as outlined below. Certified translated versions will be required once the original version is approved.

There are specific circumstances where witnessed verbal consent might be acceptable, and circumstances where individual informed consent may be waived by HSSREC.

2. Information Sheet and Consent to Participate in Research

Date: 19 February 2018

Hello, My name is Nokukhanya Mazibuko from the college of Humanities, School of Applied Social Sciences-Psychology. I am a masters student at the University of KwaZulu Natal Howard College (khanyomwelase@gmail.com, 072 4589826).

You are being invited to consider participating in a study that involves research (Exploring the perceptions and experiences of students towards HIV/AIDS peer education program at the University of KwaZulu Natal). The aim and purpose of this research is to explore the perceptions and experiences of students towards HIV/AIDS peer education program at the University of KwaZulu Natal. The study is expected to enroll (two hundred and fifty (250) participants in total, from peer education social groups. The duration of your participation if you choose to enroll and remain in the study is expected to be 20 minutes.

The study does not involve any risks and/or discomforts. The study will provide no direct benefits to participants. The study hopes to provide some understanding on perceptions and experiences of students towards HIV/AIDS peer education program

At the present time, the researcher does not foresee any risk of harm from your participation in this study, the risks that might be incurred are no greater than those encountered in daily life.

This study has been ethically reviewed and approved by the UKZN Humanities and Social Sciences Research Ethics Committee (approval number_____).

In the event of any problems or concerns/questions you may contact the researcher at (072 4589826) or the UKZN Humanities & Social Sciences Research Ethics Committee, contact details as follows:

HUMANITIES & SOCIAL SCIENCES RESEARCH ETHICS ADMINISTRATION
3. Research Office, Westville Campus
4. Govan Mbeki Building
Private Bag X 54001
Durban
4000
KwaZulu-Natal, SOUTH AFRICA
Tel: 27 31 2604557- Fax: 27 31 2604609
Email: HSSREC@ukzn.ac.za

The participation in this research is voluntary, participants may withdraw participation at any point.

All data collected will be stored in the secured supervisor's office for a period not less than five years and thereafter disposed.

INFORMED CONSENT

I (.....) have been informed about the study entitled (Exploring the perceptions and experiences of students towards HIV/AIDS peer education program at the University of KwaZulu Natal) by Nokukhanya Mazibuko.

I understand the purpose and procedures of the study.

I have been given an opportunity to answer questions about the study and have had answers to my satisfaction.

I declare that my participation in this study is entirely voluntary and that I may withdraw at any time without affecting any of the benefits that I usually am entitled to.

I have been informed about any available compensation or medical treatment if injury occurs to me as a result of study-related procedures.

I agree to participate in this study out of my own free will without fear or discrimination.

I understand that I am not forced to participate in this study.

I understand and have been informed that this is a voluntary participation and I can withdraw at any time should I wish to do so or if I feel disrespected or my rights are infringed.

I have asked all necessary questions regarding the study and have been answered to my satisfaction.

I have been informed and accept that my identity will be anonymous, the information I will give will be kept confidential and my name will not appear in any form of publication.

I have been informed and accept that the information given will be safely stored and that nobody except the researcher, the supervisor, and assessors will have access to it.

Data will be stored

If I have any further questions/concerns or queries related to the study I understand that I may contact the researcher at (072 4589826).

If I have any questions or concerns about my rights as a study participant, or if I am concerned about an aspect of the study or the researchers then I may contact:

HUMANITIES & SOCIAL SCIENCES RESEARCH ETHICS ADMINISTRATION
5. Research Office, Westville Campus
6. Govan Mbeki Building
Private Bag X 54001
Durban
4000
KwaZulu-Natal, SOUTH AFRICA
Tel: 27 31 2604557 - Fax: 27 31 2604609
Email: HSSREC@ukzn.ac.za

Additional consent, where applicable

I hereby provide consent to:

Audio-record my interview / focus group discussion YES / NO

_____ _____
Signature of Participant **Date**

_____ _____
Signature of Witness **Date**
(Where applicable)

_____ _____
Signature of Translator **Date**
(Where applicable)

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QUESTIONNAIRES

SECTION ONE

SOCIO DEMOGRAPHICS

Q.1. Gender

1	Female	
2	Male	

Q.2. Age in years

Q.3. Marital status

1	Single	
2	Married	
3	Living with a partner	
4	Widow	

Q.4.Race

1		African	
2		Indian	
3		White	
4		Colored	

Q.5. Academic level

1	Undergraduate	
2	Post graduate	
Year of study		

Q.6 Are you a peer educator?

1	Yes	
2	No	

SECTION TWO

HIV/AIDS KNOWLEDGE

Question number	Statement	Strong disagree	Disa gree	Neutral	agree	Strong agree
Q.7.	A person can contract HIV by sharing a glass of water with someone who is HIV positive.					
Q.8.	Withdrawing the penis before a climax (ejaculates) prevents a woman from contracting HIV during sex.					
Q.9	Condoms are less than fifty percent safe for the prevention of HIV/AIDS infection?					
Q.10.	Do you think it is important for infected people to tell their sexual partners about their HIV status.					
Q.11.	Showering and washing your genitals after sex can reduce the chances of being infected with HIV.					
Q.12.	I know where and how I can do HIV testing and counseling, and the consequences of my testing.					
Q.13.	People are likely to contract HIV by deep kissing (putting their tongues in their partners' mouth) if their partners are HIV positive.					
Q.14.	Fruits, vegetable, and Mopani worms can help people living with HIV/AIDS.					
Q.15.	Coughing and sneezing do not spread HIV.					
Q.16.	All pregnant women infected with HIV will have babies infected with HIV.					

HIV/AIDS ATTITUDE

Question number	Statement	Strong disagree	disagree	Neutral	Agree	Strong Agree
Q.17.	If I do HIV testing, people will discriminate against me if they find that I am HIV positive.					

Q.18.	A condom is not necessary when you and your partner agree not to have sex with anyone else.					
Q.19.	I do not want to do testing because the person who conducts the testing will make my results known.					
Q.20.	I can use the same toilet facilities with HIV positive people.					
Q.21.	HIV-negative students should not be allowed to socialize with HIV-positive students.					
Q.22.	I can die earlier if I know that I am HIV positive, than if I do not know my HIV status.					
Q.23.	Using a condom takes the "wonder" of sex.					
Q.24.	A condom is not necessary when you and your partner agree not to have sex with anyone else.					
Q.25.	Using a condom shows my partner that I care about him/her.					
Q.26.	People who use condoms sleep around a lot.					
Q.27.	Traditional medicines are a waste of time in the HIV/AIDS intervention.					

HIV/AIDS BEHAVIOUR

Question number	Statement	Strong Disagree	Disagree	Neutral	Agree	Strong Agree
Q.28.	I have done an HIV test in the past year.					
Q.29.	I have many sexual partners					
Q.30.	I talk with my sexual partner about HIV/AIDS before having sex with him/her.					
Q.31.	I only have sex with people who had an HIV test.					
Q.32.	I usually attend HIV/AIDS meetings, workshops and seminars.					
Q.33.	I use condom during sex					
Q.34.	I avoid risky sexual partners.					
Q.35.	I want to be involved with HIV/AIDS activities.					
Q.36.	I only have sex with an HIV negative partner, who only has sex with me.					

Q.37.	I avoid risky sexual partners.					

PERCEPTIONS OF HIV/ AIDS AND PEER EDUCATION

Question number	Statement	Strong Disagree	Disagree	Neutral	Agree	Strong Agree
Q.38.	Peer educators mix well with other students hence can positively influence them.					
Q.39.	Peer educators share information with other students with regard to HIV/AIDS.					
Q.40.	Peer educators are regarded by other students as more knowledgeable about HIV/AIDS.					
Q.41.	Peer educators are role models and their behavioral pattern is positively influential to other students					
Q.42.	Peer educators are respected by other students.					
Q.43.	Peer educators are students who can express themselves hence are listened to by fellow students.					
Q.44.	Peer educators are friendly to other students hence students feel free to ask about HIV/AIDS					
Q.45.	Peer educators must be given the opportunity to address their fellow students whenever they have.					
Q.46.	Some people have been protected from getting infected with the HIV virus by having HIV/AIDS education.					
Q.47.	Education on HIV/AIDS through peer education is a programme to be recommended in the University.					
Q.48.	The peers' education sessions are worthwhile to attend.					
Q.49.	Since peer educators have learned about HIV/AIDS they have the opportunity to inform others about how to protect themselves from getting infected.					
Q.50.	Peer educators should be provided with information regarding HIV/AIDS.					

Q.51.	Students who are peer educators are supported by their fellow students.					
Q.52.	The University should continue with peer education to bring about HIV/AIDS awareness.					